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About Basal and Squamous Cell Skin Cancer

Overview

If you have been diagnosed with basal or squamous cell skin cancer or are worried about it, you likely have a lot of questions. Learning some basics is a good place to start.

- [What Are Basal and Squamous Cell Skin Cancers?](#)

Research and Statistics

See the latest estimates for new cases of basal and squamous cell skin cancer and deaths in the US and what research is currently being done.

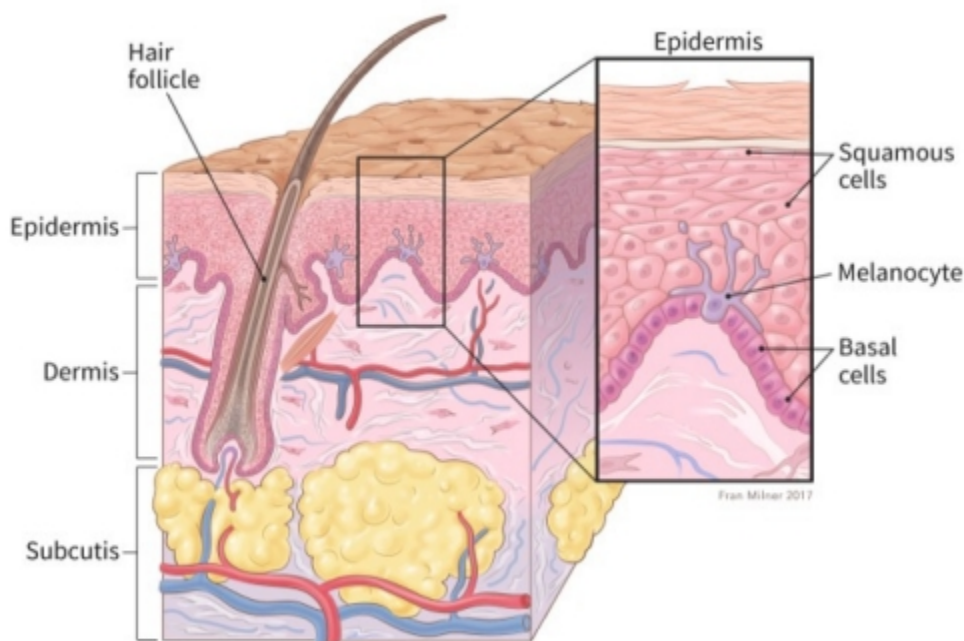
- [Key Statistics for Basal and Squamous Cell Skin Cancers](#)
- [What's New in Basal and Squamous Cell Skin Cancer Research?](#)

What Are Basal and Squamous Cell Skin Cancers?

Cancer starts when cells in the body begin to grow out of control. Cells in nearly any part of the body can become cancer cells. To learn more about how cancers start and

spread, see [What Is Cancer?](#)¹

Skin cancer begins when cells in the skin start to grow uncontrollably.



Types of skin cells

There are 3 main types of cells in the top layer of the skin (called the *epidermis*):

- **Squamous cells:** These are flat cells in the outer part of the epidermis that are constantly shed as new ones form.
- **Basal cells:** These cells are in the lower part of the epidermis, called the *basal cell layer*. These cells constantly divide to form new cells to replace the squamous cells that wear off the skin's surface. As these cells move up in the epidermis, they get flatter, eventually becoming squamous cells.
- **Melanocytes:** These cells make the brown pigment called *melanin*, which gives the skin its tan or brown color. Melanin acts as the body's natural sunscreen, protecting the deeper layers of the skin from some of the harmful effects of the sun. For most people, when skin is exposed to the sun, melanocytes make more of the pigment, causing the skin to tan or darken.

The epidermis is separated from the deeper layers of skin by the basement membrane. When a skin cancer becomes more advanced, it generally grows through this barrier and into the deeper layers.

Types of skin cancer

Basal cell carcinoma

This is the most common type of skin cancer. About 8 out of 10 skin cancers are basal cell carcinomas (also called *basal cell cancers*). When seen under a microscope, the cells in these cancers look like cells in the lowest layer of the epidermis, called the *basal cell layer*.

These cancers usually develop on sun-exposed areas, especially the head and neck. These cancers tend to grow slowly. It's very rare for a basal cell cancer to spread to other parts of the body. But if a basal cell cancer is left untreated, it can grow into nearby areas and invade the bone or other tissues beneath the skin.

If not removed completely, basal cell carcinoma can recur (come back) in the same place on the skin. People who have had basal cell skin cancers are also more likely to get new ones in other places.

Squamous cell carcinoma

About 2 out of 10 skin cancers are squamous cell carcinomas (also called *squamous cell cancers*). The cells in these cancers look like abnormal versions of the squamous cells seen in the outer layers of the skin.

These cancers commonly appear on sun-exposed areas of the body such as the face, ears, neck, lips, and backs of the hands. They can also develop in scars or chronic skin sores elsewhere. They sometimes start in actinic keratoses (described below). Less often, they form in the skin of the genital area.

Squamous cell cancers are more likely to grow into deeper layers of skin and spread to other parts of the body than basal cell cancers, although this is still uncommon.

Keratoacanthomas are dome-shaped tumors that are found on sun-exposed skin. They may start out growing quickly, but their growth usually slows down. Many keratoacanthomas shrink or even go away on their own over time without any treatment. But some continue to grow, and a few may even spread to other parts of the body. Their growth is often hard to predict, so many skin cancer experts consider them a type of squamous cell skin cancer and treat them as such.

Melanoma

These cancers develop from melanocytes, the pigment-making cells of the skin. Melanocytes can also form benign (non-cancerous) growths called *moles*. Melanomas are much less common than basal and squamous cell cancers, but they are more likely to grow and spread if left untreated. Melanoma and moles are discussed in [Melanoma Skin Cancer](#)².

Less common types of skin cancer

Other types of skin cancer are much less common and are treated differently. These include:

- [Merkel cell carcinoma](#)³
- [Kaposi sarcoma](#)⁴
- [Cutaneous \(skin\) lymphoma](#)⁵
- **Skin adnexal tumors** (tumors that start in hair follicles or skin glands)
- Various types of [sarcomas](#)⁶

Together, these types account for less than 1% of all skin cancers.

Pre-cancerous and pre-invasive skin conditions

These conditions may develop into skin cancer or may be very early stages of skin cancer.

Actinic keratosis (solar keratosis)

Actinic keratosis (AK), also known as *solar keratosis*, is a pre-cancerous skin condition caused by too much exposure to the sun. AKs are usually small (less than 1/4 inch across), rough or scaly spots that may be pink-red or flesh-colored. Usually they start on the face, ears, backs of the hands, and arms of middle-aged or older people with fair skin, although they can occur on other sun-exposed areas. People who have them usually develop more than one.

AKs tend to grow slowly and usually do not cause any symptoms (although some might be itchy or sore). They sometimes go away on their own, but they may come back.

Some AKs may turn into squamous cell skin cancers. Most AKs do not become cancer, but it can be hard sometimes to tell them apart from true skin cancers, so doctors often recommend [treating](#)⁷ them. If they are not treated, you and your doctor should check them regularly for changes that might be signs of skin cancer.

Squamous cell carcinoma in situ (Bowen disease)

Squamous cell carcinoma in situ, also called Bowen disease, is the earliest form of squamous cell skin cancer. “In situ” means that the cells of these cancers are still only in the epidermis (the upper layer of the skin) and have not invaded into deeper layers.

Bowen disease appears as reddish patches. Compared with AKs, Bowen disease patches tend to be larger (sometimes over ½ inch across), redder, scaly, and sometimes crusted. Like AK, Bowen disease usually doesn’t cause symptoms, although it might be itchy or sore.

Like most other skin cancers (and AKs), these patches most often appear in sun-exposed areas. Bowen disease can also occur in the skin of the anal and genital areas (where it is known as *erythroplasia of Queyrat* or *Bowenoid papulosis*). This is often related to sexually transmitted infection with human papilloma viruses (HPVs), the viruses that can also cause genital warts.

Bowen disease can sometimes progress to an invasive squamous cell skin cancer, so doctors usually recommend [treating](#)⁸ it. People who have these are also at higher risk for other skin cancers, so close follow-up with a doctor is important.

Benign skin tumors

Most skin tumors are benign (not cancerous) and rarely if ever turn into cancers. There are many kinds of benign skin tumors, including:

- Most types of **moles** (see [Melanoma Skin Cancer](#)⁹ for more about moles)
- **Seborrheic keratoses**: tan, brown, or black raised spots with a waxy texture or occasionally a slightly rough and crumbly surface when they are on the legs (also known as *stucco keratosis*)
- **Hemangiomas**: benign blood vessel growths, often called *strawberry spots*
- **Lipomas**: soft tumors made up of fat cells
- **Warts**: rough-surfaced growths caused by some types of human papilloma virus (HPV)

Hyperlinks

1. www.cancer.org/cancer/cancer-basics/what-is-cancer.html
2. www.cancer.org/cancer/melanoma-skin-cancer.html
3. www.cancer.org/cancer/merkel-cell-skin-cancer.html

4. www.cancer.org/cancer/kaposi-sarcoma.html
5. www.cancer.org/cancer/skin-lymphoma.html
6. www.cancer.org/cancer/soft-tissue-sarcoma.html
7. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/treating/actinic-keratosis.html
8. www.cancer.org/cancer/melanoma-skin-cancer.html

References

See all references for Basal and Squamous Cell Skin Cancer

www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html

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Key Statistics for Basal and Squamous Cell Skin Cancers

Cancers of the skin (most of which are basal and squamous cell skin cancers) are by far the most common of all types of cancer. According to one estimate, about 5.4 million basal and squamous cell skin cancers are diagnosed each year (occurring in about 3.3 million Americans, as some people have more than one). About 8 out of 10 of these are basal cell cancers. Squamous cell cancers occur less often.

The number of these cancers has been increasing for many years. This is probably from a combination of better skin cancer detection, people getting more sun exposure, and people living longer.

Death from these cancers is uncommon. It's thought that about 2,000 people in the US die each year from these cancers, and that this rate has been dropping in recent years. Most people who die from these cancers are elderly and may not have seen a doctor until the cancer had already grown quite large. Other people more likely to die of these cancers are those whose immune system is suppressed, such as those who have had organ transplants.

The exact number of people who develop or die from basal and squamous cell skin cancers each year is not known for sure. Statistics of most other cancers are known because they are reported to and tracked by cancer registries, but basal and squamous cell skin cancers are not.

References

See all references for Basal and Squamous Cell Skin Cancer

www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html

American Cancer Society. *Facts & Figures 2019*. American Cancer Society. Atlanta, Ga. 2019.

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What's New in Basal and Squamous Cell Skin Cancer Research?

Research into the causes, prevention, and treatment of basal and squamous cell skin cancer is going on in many medical centers throughout the world.

Basic skin cancer research

Scientists have made a great deal of progress in recent years in learning how ultraviolet (UV) light damages the DNA inside normal skin cells, and how this might cause them to become cancer cells. Researchers are working to apply this new information to strategies for preventing and treating skin cancers.

Public education

Most skin cancers can be prevented. The best way to lower the number of skin cancers and the pain and loss of life from this disease is to educate the public about [skin cancer risk factors, prevention, and detection](#)¹. It's important for health care professionals and

skin cancer survivors to remind others about the dangers of too much [UV exposure](#)² (both from the sun and from man-made sources such as tanning beds) and about how easily they can protect their skin from UV rays.

Skin cancer can often be [found early](#)³, when it is most likely to be cured. Monthly skin self-exams and awareness of the [warning signs of skin cancer](#)⁴ may be helpful in finding most skin cancer when they are at an early, curable stage.

The American Academy of Dermatology (AAD) sponsors annual free skin cancer screenings throughout the country. Many local American Cancer Society offices work closely with AAD to provide volunteers for registration, coordination, and education efforts related to these free screenings. Look for information in your area about these screenings or call the [American Academy of Dermatology](#)⁵ for more information.

Along with recommending staying in the shade, the American Cancer Society uses a slogan popularized in Australia as part of its skin cancer prevention message in the United States. “Slip! Slop! Slap!®... and Wrap” is a catchy way to remember when going outdoors to slip on a shirt, slop on sunscreen, slap on a hat, and wrap on sunglasses to protect your eyes and the sensitive skin around them.

Preventing genital skin cancers

Squamous cell cancers that start in the genital region account for almost half of the deaths from this type of skin cancer. Many of these cancers are related to infection with certain types of [human papilloma virus \(HPV\)](#)⁶, which can be spread through sexual contact. Limiting sexual partners and using safer sex practices such as wearing condoms may therefore help lower the risk of some of these cancers.

In recent years, vaccines have become available to help protect against infection from some types of HPV. The main intent of the vaccines has been to reduce the risk of cervical cancer, but they may also lower the risk of other cancers related to HPV, including some squamous cell skin cancers.

Chemoprevention

Chemoprevention is the use of drugs to reduce cancer risk. This is likely to be more useful for people at high risk of skin cancers, such as those with certain congenital conditions (basal cell nevus syndrome, xeroderma pigmentosum, etc.), a history of skin cancer, or those who have received organ transplants, rather than for people at average risk of skin cancer.

Some of the most widely studied drugs so far are the retinoids, which are drugs related to vitamin A. They have shown some promise in reducing the risk of squamous cell cancers, but they can have side effects, including possibly causing birth defects. For this reason they are not widely used at this time, except in some people at very high risk. Further studies of retinoids are under way.

Other drugs are being looked at to reduce the risk of basal cell skin cancers in people at high risk. Targeted drugs called *hedgehog pathway inhibitors* may help some people with basal cell nevus syndrome. For example, the drug vismodegib (Erivedge) has been shown to lower the number of new basal cell cancers and shrink existing tumors in people with this syndrome. The drug does have some side effects, including taste loss and muscle cramps, which can make it hard for some people to take every day. Further research on this and similar drugs is under way.

Diagnosis

Some newer approaches to diagnosing skin cancer don't require the removal of a skin sample. Examples of such "optical biopsies" include reflectance confocal microscopy (RCM) and optical coherence tomography (OCT). These techniques are now available in some centers and will likely become more common in the coming years.

Treatment

Local treatments

Current local treatments such as surgery and radiation therapy work well for most basal and squamous cell skin cancers. Still, even some small cancers can be hard to treat if they're in certain areas. Newer forms of non-surgical treatment such as new topical drugs, photodynamic therapy, and laser surgery may help reduce scarring and other possible side effects of treatment. The best way to use these treatments is now being studied.

Treating advanced disease

Most basal and squamous cell skin cancers are found and treated at an early stage, when they are likely to be cured, but some can spread to other parts of the body. These cancers can often be hard to treat with current therapies such as [radiation](#)⁷ and [chemotherapy](#)⁸.

Squamous cell cancers: Several studies are testing newer targeted drugs for

advanced squamous cell cancers. Cells from these cancers often have too much of a protein called *EGFR* on their surfaces, which may help them grow. Drugs that target this protein, such as cetuximab (Erbix), are now being tested in clinical trials.

Basal cell cancers: It's very rare for basal cell cancers to reach an advanced stage, but when they do, these cancers can be hard to treat. Vismodegib and sonidegib, drugs that target the hedgehog signaling pathway in cells, may help some people (see [Targeted Therapy for Basal and Squamous Cell Skin Cancers](#)⁹). Other drugs that target this pathway are now being studied as well.

Hyperlinks

1. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/causes-risks-prevention.html
2. www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html
3. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/detection-diagnosis-staging/detection.html
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6. www.cancer.org/cancer/cancer-causes/infectious-agents/hpv.html
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9. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/treating/targeted-therapy.html
10. <https://www.aad.org/>
11. <https://www.aad.org/spot-skin-cancer>

Additional Resources

American Academy of Dermatology (AAD) Toll-free number: 1-888-462-3376 (1-888-462-DERM) Website: www.aad.org (www.aad.org)¹⁰ Spot Skin Cancer website: www.aad.org/spot-skin-cancer (www.aad.org/spot-skin-cancer)¹¹

- For information on skin cancer, a skin cancer risk assessment, a locator for free skin cancer screenings, and a dermatologist locator

References

See all references for Basal and Squamous Cell Skin Cancer

www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html

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Basal and Squamous Cell Skin Cancer Causes, Risk Factors, and Prevention

Risk Factors

A risk factor is anything that affects your chance of getting a disease such as cancer. Learn more about the risk factors for basal and squamous cell skin cancer.

- [Basal and Squamous Cell Skin Cancer Risk Factors](#)
- [What Causes Basal and Squamous Cell Skin Cancers?](#)

Prevention

There is no sure way to prevent skin cancer. But there are things you can do that might lower your risk. Learn more.

- [Can Basal and Squamous Cell Skin Cancers Be Prevented?](#)
- [Skin Cancer Prevention and Early Detection¹](#)

Basal and Squamous Cell Skin Cancer Risk Factors

A risk factor is anything that affects your chance of getting a disease such as cancer. Different cancers have different risk factors. Some risk factors, like smoking and excess

sun exposure, can be changed. Others, like your age or family history, can't be changed.

Having a risk factor, or even many risk factors, does not mean that you will get skin cancer. Many people with risk factors for skin cancer, never get it. Others with this disease may have few or no known risk factors.

Still, it's important to know about the risk factors for skin cancer because there may be things you can do that could lower your risk of getting it. If you are at higher risk because of certain factors, there are also [things you can do that might help find it early](#)¹, when it's likely to be easier to treat.

Several risk factors make a person more likely to get basal cell or squamous cell skin cancer. (These factors don't necessarily apply to some other forms of skin cancer, such as [Kaposi sarcoma](#)² and [skin lymphoma](#)³.)

Ultraviolet (UV) light exposure

Exposure to [ultraviolet \(UV\) rays](#)⁴ is thought to be the major risk factor for most skin cancers. Sunlight is the main source of UV rays. Tanning beds are another source of UV rays.

While UV rays make up only a very small portion of the sun's rays, they are the main cause of the damaging effects of the sun on the skin. UV rays damage the DNA of skin cells. Skin cancers begin when this damage affects the DNA of genes that control skin cell growth.

To learn more about the effects of UV rays on the skin and what you can do to protect yourself and your loved ones, see [Skin Cancer Prevention and Early Detection](#)⁵.

Having light-colored skin

Whites have a much higher risk of skin cancer than African Americans or Hispanics. This is because the skin pigment melanin has a protective effect in people with darker skin. Whites with fair (light-colored) skin that freckles or burns easily are at especially high risk.

Albinism is an inherited lack of protective skin pigment. People with this condition may have pink-white skin and white hair. They have a high risk of getting sunburns and skin cancer, so they need to be careful to [protect their skin](#).

Being older

The risk of getting basal and squamous cell skin cancers rises as people get older. This is probably because of the buildup of sun exposure over time. These cancers are becoming more common in younger people as well, probably because they are spending more time in the sun with their skin exposed.

Being male

Men are more likely than women to have basal and squamous cell cancers of the skin. This is thought to be due mainly to getting more sun exposure.

Exposure to certain chemicals

Being exposed to large amounts of [arsenic](#)⁶ increases the risk of developing skin cancer. Arsenic is an element found naturally in well water in some areas. It's also used in making some pesticides and in some other industries.

Workers exposed to coal tar, paraffin, and certain types of oil may also have an increased risk of skin cancer.

Radiation exposure

People who have had radiation treatment have a higher risk of developing skin cancer in the area that received the treatment. This is particularly a concern in children who have had radiation treatment for cancer.

Previous skin cancer

People who have had a basal or squamous cell cancer have a much higher chance of developing another one.

Long-term or severe skin inflammation or injury

Scars from severe burns, areas of skin over serious bone infections, and skin damaged by some severe inflammatory skin diseases are more likely to develop skin cancers, although this risk is generally small.

Psoriasis treatment

Psoralens and ultraviolet light (PUVA) treatments given to some patients with psoriasis (a long-lasting inflammatory skin disease) can increase the risk of developing squamous cell skin cancer and probably other skin cancers.

Xeroderma pigmentosum (XP)

This very rare inherited condition reduces the ability of skin cells to repair DNA damage caused by sun exposure. People with this disorder often develop many skin cancers, starting in childhood.

Basal cell nevus syndrome (also known as nevoid basal cell carcinoma syndrome or Gorlin syndrome)

In this rare congenital (present at birth) condition, people develop many basal cell cancers over their lifetime. People with this syndrome may also have abnormalities of the jaw (and other bones), eyes, and nervous tissue.

Most of the time this condition is inherited from a parent. In families with this syndrome, those affected often start to develop basal cell cancers as children or teens. Exposure to UV rays can increase the number of tumors these people get.

Weakened immune system

The immune system helps the body fight cancers of the skin and other organs. People with weakened immune systems (from certain diseases or medical treatments) are more likely to develop many types of skin cancer, including squamous cell cancer, [melanoma](#)⁷, and less common types such as [Kaposi sarcoma](#)⁸ and [Merkel cell carcinoma](#)⁹.

For example, people who get organ transplants are usually given medicines that weaken their immune system to help prevent their body from rejecting the new organ. This increases their risk of developing skin cancer. Skin cancers in people with weakened immune systems tend to grow faster and are more likely to be fatal.

Treatment with large doses of corticosteroid drugs can also weaken the immune system. This may also increase a person's risk of skin cancer.

People infected with [HIV](#)¹⁰, the virus that causes AIDS, often have weakened immune systems and also are at increased risk for basal and squamous cell cancers.

Human papilloma virus (HPV) infection

[Human papilloma viruses \(HPVs\)](#)¹¹ are a group of more than 150 viruses, many of which can cause papillomas, or warts. The warts that people commonly get on their hands and feet are not related to any form of cancer. But some HPV types, especially those that affect the genital and anal areas and the skin around the fingernails, seem to be related to skin cancers in these areas.

Smoking

[People who smoke](#)¹² are more likely to develop squamous cell skin cancer, especially on the lips. Smoking is not a known risk factor for basal cell cancer.

Hyperlinks

1. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/detection-diagnosis-staging/detection.html
2. www.cancer.org/cancer/kaposi-sarcoma.html
3. www.cancer.org/cancer/skin-lymphoma.html
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12. www.cancer.org/cancer/cancer-causes/tobacco-and-cancer.html

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See all references for Basal and Squamous Cell Skin Cancer
(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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What Causes Basal and Squamous Cell Skin Cancers?

While many [risk factors for basal and squamous cell skin cancers](#) have been found, it's not always clear exactly how these factors might cause cancer.

Most basal cell and squamous cell skin cancers are caused by repeated and unprotected skin exposure to [ultraviolet \(UV\) rays](#)¹ from sunlight, as well as from man-made sources such as tanning beds.

UV rays can damage the DNA inside skin cells. DNA is the chemical in each of our cells that makes up our genes, which control how our cells function. We usually look like our parents because they are the source of our DNA. But DNA affects more than just how we look.

Some genes help control when our cells grow, divide into new cells, and die:

- Genes that help cells grow, divide, and stay alive are called **oncogenes**.
- Genes that keep cell growth in check by slowing down cell division or causing cells to die at the right time are called **tumor suppressor genes**.

Cancers can be caused by DNA changes that turn on oncogenes or turn off tumor suppressor genes. Changes in several different genes are usually needed for a cell to become cancer.

Researchers don't yet know all of the DNA changes that result in skin cancer, but they have found that in many skin cancers the cells have changes in tumor suppressor genes.

The gene most often altered in squamous cell cancers is called *TP53*. This tumor suppressor gene normally causes cells with damaged DNA to die. When *TP53* is altered, these abnormal cells may live longer and perhaps go on to become cancerous.

A gene often mutated in basal cell cancers is the *PTCH1* gene, which is part of the "hedgehog" signaling pathway inside cells. *PTCH1* is a tumor suppressor gene that normally helps keep cell growth in check, so changes in this gene can allow cells to grow out of control. People who have basal cell nevus syndrome (Gorlin syndrome), which is often inherited from a parent and results in getting many basal cell cancers, have an altered *PTCH1* gene in all the cells of their body.

These are not the only gene changes that play a role in the development of skin cancer. There are likely to be many others as well.

People with xeroderma pigmentosum (XP) have a high risk for skin cancer. XP is a rare, inherited condition resulting from a defect in an enzyme that repairs DNA damage. Because people with XP are less able to repair DNA damage caused by sunlight, they often develop many cancers on sun-exposed areas of their skin.

The link between squamous cell skin cancer and infection with some types of the [human papilloma virus \(HPV\)](#)² also involves DNA and genes. These viruses have genes that affect growth-regulating proteins of infected skin cells. This can cause skin cells to grow too much and to not die when they're supposed to.

Scientists are studying other links between DNA changes and skin cancer. A better understanding of how damaged DNA leads to skin cancer might be used to design treatments to overcome or repair that damage.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html
2. www.cancer.org/cancer/cancer-causes/infectious-agents/hpv.html

References

See all references for Basal and Squamous Cell Skin Cancer

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Can Basal and Squamous Cell Skin Cancers Be Prevented?

There is no sure way to prevent all basal and squamous cell skin cancers. Some risk factors such as your age, gender, race, and family history can't be controlled. But there

are things you can do that could lower your risk of getting these and other skin cancers.

Limit your exposure to ultraviolet (UV) rays

The most important way to lower your risk of basal and squamous cell skin cancers is to limit your exposure to [UV rays](#)¹. Practice sun safety when you are outdoors.

Look for shade

Simply staying in the shade is one of the best ways to limit your UV exposure.

“Slip! Slop! Slap!® ... and Wrap”

This catchphrase can help you remember some of the key steps you can take to protect yourself from UV rays. If you are going to be in the sun:

- Slip on a shirt.
- Slop on sunscreen.
- Slap on a hat.
- Wrap on sunglasses to protect the eyes and sensitive skin around them.

Avoid tanning beds and sun lamps

Many people believe the UV rays of tanning beds are harmless. This is not true. Tanning lamps give off UV rays, which can cause long-term skin damage and can contribute to skin cancer. Most skin doctors and health organizations recommend not using tanning beds and sun lamps.

Protect children from the sun

Children need special attention, since they tend to spend more time outdoors and can burn more easily. Parents and other caregivers should protect children from excess sun exposure by using the steps above. Children need to be taught about the dangers of too much sun exposure as they become more independent.

Avoid harmful chemicals

Exposure to certain chemicals, such as [arsenic](#)², can increase a person’s risk of skin

cancer. People can be exposed to arsenic from well water in some areas, pesticides and herbicides, some medicines and imported traditional herbal remedies, and in certain occupations (such as mining and smelting).

Check your skin regularly

[Checking your skin regularly](#)³ may help you spot any new growths or abnormal areas and show them to your doctor before they even have a chance to turn into skin cancer. To learn more, see [Can Basal and Squamous Cell Skin Cancers be Found Early?](#)⁴

Don't smoke

Smoking has been linked to an increased risk of squamous cell skin cancer, as well as to many other types of cancer. If you are thinking about [quitting smoking](#)⁵ and need help, call the American Cancer Society for information and support at 1-800-227-2345.

Avoid weakening your immune system (when possible)

Having a weakened immune system increases your risk of getting skin cancer, and if you do get it, it might be harder to treat.

[Infection with HIV](#)⁶, the virus that causes AIDS, can weaken the immune system. Avoiding known risk factors for HIV infection, such as intravenous (IV) drug use and having unprotected sex with many partners, can also lower your risk of getting skin cancer and many other types of cancer.

Some people need to take medicines to suppress their immune system. This includes people who have had organ transplants and some people with autoimmune diseases. People with cancer also sometimes need to take medicines such as chemotherapy that can lower their immune function. For these people, the benefit from taking these medicines will likely far outweigh the small increased risk of getting skin cancer.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html
2. www.cancer.org/cancer/skin-cancer/galleries/skin-self-exam-gallery.html
3. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/detection-diagnosis-staging/detection.html
4. www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking.html

5. www.cancer.org/cancer/cancer-causes/infectious-agents/hiv-infection-aids.html

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See all references for Basal and Squamous Cell Skin Cancer

(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Basal and Squamous Cell Skin Cancer Early Detection, Diagnosis, and Staging

Detection and Diagnosis

Catching cancer early often allows for more treatment options. Some early cancers may have signs and symptoms that can be noticed, but that is not always the case.

- [Can Basal and Squamous Cell Skin Cancers Be Found Early?](#)
- [Skin Cancer Prevention and Early Detection¹](#)
- [Signs and Symptoms of Basal and Squamous Cell Skin Cancers](#)
- [Skin Cancer Galleries²](#)
- [Tests for Basal and Squamous Cell Skin Cancers](#)

Stages of Basal and Squamous Cell Skin Cancer

After a skin cancer diagnosis, staging can provide important information about the extent of cancer in the body and anticipated response to treatment.

- [Basal and Squamous Cell Skin Cancer Stages](#)

Questions to Ask About Basal and Squamous Cell Skin Cancers

Get some questions you can ask your health care team to help you better understand your diagnosis and treatment options.

- [What Should You Ask Your Health Care Team About Basal and Squamous Cell Skin Cancers?](#)

Can Basal and Squamous Cell Skin Cancers Be Found Early?

Basal cell and squamous cell skin cancers can often be found early, when they are likely to be easier to treat.

Skin self-exam

Although the American Cancer Society does not have guidelines for the early detection of skin cancer, knowing your own skin is important to finding skin cancer early. Learn the patterns of moles, blemishes, freckles, and other marks on your skin so that you'll notice any changes.

Many doctors recommend checking your skin, preferably once a month. [Skin self-exams](#)¹ are best done in a well-lit room in front of a full-length mirror. Use a hand-held mirror for areas that are hard to see, such as the backs of your thighs.

All areas should be examined, including your palms and soles, scalp, ears, nails, and your back. Friends and family members can also help you with these exams, especially for those hard-to-see areas, such as your scalp and back.

Be sure to show your doctor any areas that concern you and ask your doctor to look at areas that may be hard for you to see.

Any spots on the skin that are new or changing in size, shape, or color should be seen by a doctor promptly. Any unusual sore, lump, blemish, marking, or change in the way an area of the skin looks or feels may be a sign of skin cancer or a warning that it might occur. The area might become red, swollen, scaly, crusty or begin oozing or bleeding. It may feel itchy, tender, or painful.

Basal cell and squamous cell skin cancers can look like a variety of marks on the skin. The key warning signs are a new growth, a spot or bump that's getting larger over time, or a sore that doesn't heal within a few weeks. (See [Signs and Symptoms of Basal and Squamous Cell Skin Cancer](#) for a more detailed description of what to look for.)

Exam by a health care professional

Some doctors and other health care professionals do skin exams as part of routine health check-ups.

Having regular skin exams is especially important for people who are at high risk of skin cancer, such as people with reduced immunity (for example, those who have had an organ transplant) or people with conditions such as basal cell nevus syndrome (Gorlin syndrome) or xeroderma pigmentosum (XP). Talk to your doctor about how often you should have your skin examined.

Hyperlinks

1. www.cancer.org/cancer/skin-cancer/galleries/skin-self-exam-gallery.html

References

See all references for Basal and Squamous Cell Skin Cancer
(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Signs and Symptoms of Basal and Squamous Cell Skin Cancers

Skin cancers often do not cause bothersome symptoms until they have grown quite large. Then they may itch, bleed, or even hurt. But typically they can be seen or felt long before they reach this point.

Basal cell carcinomas

Basal cell cancers usually develop on areas exposed to the sun, especially the face, head, and neck, but they can occur anywhere on the body.

These cancers can appear as:

- Flat, firm, pale or yellow areas, similar to a scar
- Raised reddish patches that might be itchy

- Small, pink or red, translucent, shiny, pearly bumps, which might have blue, brown, or black areas
- Pink growths with raised edges and a lower area in their center, which might contain abnormal blood vessels spreading out like the spokes of a wheel
- Open sores (which may have oozing or crusted areas) that don't heal, or that heal and then come back

Basal cell cancers are often fragile and might bleed after shaving or after a minor injury. Sometimes people go to the doctor because they have a sore or a cut from shaving that just won't heal, which turns out to be a basal cell cancer. A simple rule of thumb is that most shaving cuts heal within a week or so.

Squamous cell carcinomas

Squamous cell cancers tend to occur on sun-exposed areas of the body such as the face, ear, neck, lip, and back of the hands. Less often, they form in the skin of the genital area. They can also develop in scars or skin sores elsewhere.

These cancers can appear as:

- Rough or scaly red patches, which might crust or bleed
- Raised growths or lumps, sometimes with a lower area in the center
- Open sores (which may have oozing or crusted areas) that don't heal, or that heal and then come back
- Wart-like growths

Both basal and squamous cell skin cancers can also develop as a flat area showing only slight changes from normal skin. To see some examples of basal and squamous cell cancers, visit our [Skin Cancer Image Gallery](#)¹.

These and other types of skin cancers can also look different from the descriptions above. This is why it's important to have any new or changing skin growths, sores that don't heal, or other areas that concern you checked by your doctor.

Hyperlinks

1. www.cancer.org/cancer/skin-cancer/galleries/skin-cancer-image-gallery.html

References

See all references for Basal and Squamous Cell Skin Cancer

(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Tests for Basal and Squamous Cell Skin Cancers

Most skin cancers are brought to a doctor's attention because of [signs or symptoms](#) a person is having.

If you have an abnormal area that might be skin cancer, your doctor will examine it and might do tests to find out if it is cancer or some other skin condition. If there is a chance the skin cancer has spread to other areas of the body, other tests might be done as well.

Medical history and physical exam

Usually the first step is for your doctor to ask about your symptoms, such as when the mark first appeared on the skin, if it has changed in size or appearance, and if it has been painful, itchy, or bleeding. You might also be asked about past exposures to causes of skin cancer (including sunburns and tanning practices) and if you or anyone in your family has had skin cancer.

During the physical exam, the doctor will note the size, shape, color, and texture of the area(s) in question, and whether it is bleeding, oozing, or crusting. The rest of your body may be checked for moles and other spots that could be related to skin cancer.

The doctor may also feel the nearby lymph nodes, which are bean-sized collections of immune system cells under the skin in certain areas. Some skin cancers can spread to lymph nodes. When this happens, the lymph nodes might be felt as lumps under the skin.

If you are being seen by your primary doctor and skin cancer is suspected, you may be

referred to a dermatologist (a doctor who specializes in skin diseases), who will look at the area more closely.

Along with a standard physical exam, some dermatologists use a technique called *dermatoscopy* (also known as *dermoscopy*, *epiluminescence microscopy [ELM]* or *surface microscopy*) to see spots on the skin more clearly. The doctor uses a dermatoscope, which is a special magnifying lens and light source held near the skin. Sometimes a thin layer of alcohol or oil is used with this instrument. The doctor may take a digital photo of the spot.

When used by an experienced dermatologist, this test can improve the accuracy of finding skin cancers early. It can also often help reassure you if a spot on the skin is probably benign (non-cancerous) without the need for a biopsy.

Skin biopsy

If the doctor thinks that a suspicious area might be skin cancer, the area (or part of it) will be removed and sent to a lab to be looked at under a microscope. This is called a *skin biopsy*. If the biopsy removes the entire tumor, it's often enough to cure basal and squamous cell skin cancers without further treatment.

There are different types of skin biopsies. The doctor will choose one based on the suspected type of skin cancer, where it is on your body, its size, and other factors. Any biopsy will probably leave at least a small scar. Different methods can result in different scars, so if this is a concern, ask your doctor about possible scarring before the biopsy is done.

Skin biopsies are done using a local anesthetic (numbing medicine), which is injected into the area with a very small needle. You will probably feel a small prick and a little stinging as the medicine is injected, but you should not feel any pain during the biopsy.

Shave (tangential) biopsy

For a shave biopsy, the doctor shaves off the top layers of the skin with a small surgical blade. Bleeding from the biopsy site is then stopped by applying an ointment or a chemical that stops bleeding, or by using a small electrical current to cauterize the wound.

Punch biopsy

For a punch biopsy, the doctor uses a tool that looks like a tiny round cookie cutter to

remove a deeper sample of skin. The doctor rotates the punch biopsy tool on the skin until it cuts through all the layers of the skin. The sample is removed and the edges of the biopsy site are often stitched together.

Incisional and excisional biopsies

To examine a tumor that may have grown into deeper layers of the skin, the doctor may use an incisional or excisional biopsy.

- An **incisional biopsy** removes only a portion of the tumor.
- An **excisional biopsy** removes the entire tumor.

For these types of biopsies, a surgical knife is used to cut through the full thickness of skin. A wedge or sliver of skin is removed for examination, and the edges of the wound are usually stitched together.

Examining the biopsy samples

All skin biopsy samples are sent to a lab, where they are looked at with a microscope by a doctor called a *pathologist*. Often, the samples are sent to a dermatopathologist, a doctor who has special training in looking at skin samples.

Lymph node biopsy

It's rare for basal or squamous cell cancer to spread beyond the skin, but if it does it usually goes first to nearby lymph nodes, which are bean-sized collections of immune cells. If your doctor feels lymph nodes under the skin near the tumor that are too large or too firm, a lymph node biopsy may be done to find out if cancer has spread to them.

Fine needle aspiration biopsy

For a fine needle aspiration (FNA) biopsy, the doctor uses a syringe with a thin, hollow needle to remove very small fragments of the lymph node. The needle is smaller than the needle used for a blood test. A local anesthetic is sometimes used to numb the area first. This test rarely causes much discomfort and does not leave a scar.

FNA biopsies are not as invasive as some other types of biopsies, but they may not always provide a large enough sample to find cancer cells.

Surgical (excisional) lymph node biopsy

If an FNA does not find cancer in a lymph node but the doctor still suspects the cancer has spread there, the lymph node may be removed by surgery and examined. If the lymph node is just under the skin, this can often be done in a doctor's office or outpatient surgical center using local anesthesia. This will leave a small scar.

References

See all references for Basal and Squamous Cell Skin Cancer

www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html

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Basal and Squamous Cell Skin Cancer Stages

After someone is diagnosed with cancer, doctors will try to figure out if it has spread, and if so, how far. This process is called *staging*. The stage of a cancer describes how much cancer is in the body. It helps determine how serious the cancer is and how best to treat it. Staging is determined by examining tissue removed during an operation and sometimes imaging tests and physical exams (described in [Tests for Basal and Squamous Cell Skin Cancers](#)).

Determining the stage of **basal cell skin cancers** is rarely needed, because these cancers are almost always cured before they spread to other parts of the body.

Squamous cell skin cancers are more likely to spread (although this risk is still small), so determining the stage can be more important, particularly in people who are at higher risk. This includes people with weakened immune systems, such as those who have had organ transplants and people infected with HIV, the virus that causes AIDS. Most squamous cell skin cancers occur in the head and neck region and tend to have a higher risk of recurring (coming back) or spreading compared to those in other locations.

The most recent American Joint Committee on Cancer (AJCC) staging system, effective

January 2018, applies to squamous cell and basal cell carcinoma skin cancers of the head and neck area (lip, ear, face, scalp and neck). If your skin cancer is in the head and neck area, talk to your doctor about your specific stage.

How is the stage determined?

The system most often used to stage basal and squamous cell skin cancers of the head and neck area is the American Joint Commission on Cancer (AJCC) TNM system, which is based on 3 key pieces of information:

- The extent (size) of the tumor (**T**): Where is the cancer located? How large is the cancer? Has it grown into nearby structures or tissues?
- The spread to nearby lymph nodes (**N**): Has the cancer spread to nearby lymph nodes?
- The spread (**metastasis**) to distant sites (**M**): Has the cancer spread to other parts of the body?

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced.

Once a person's T, N, and M categories have been determined, this information is combined in a process called *stage grouping* to assign an overall stage. The earliest stage of skin cancer is stage 0 (also called *carcinoma in situ*, or CIS). The other stages range from I (1) through IV (4). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more.

Cancer staging can be complex, so ask your doctor to explain it to you in a way you understand. For more information see [Cancer Staging](#)¹.

Hyperlinks

1. www.cancer.org/treatment/understanding-your-diagnosis/staging.html

References

American Joint Committee on Cancer. Cutaneous Squamous Cell Carcinoma of the Head and Neck. In: *AJCC Cancer Staging Manual*. 8th ed. New York, NY: Springer; 2017: 171.

See all references for Basal and Squamous Cell Skin Cancer

(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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What Should You Ask Your Health Care Team About Basal and Squamous Cell Skin Cancers?

It's important to have honest, open discussions with your doctor. Ask any question, no matter how small it might seem. Here are some questions you might want to ask:

When you're told you have skin cancer

- What [type of skin cancer](#)¹ do I have?
- Can you explain the different types of skin cancer?
- Has my cancer grown deeply into the skin? Has it spread to other parts of the body?
- Do I need any other [tests](#) before we can decide on treatment?
- Do I need to see any other doctors?
- If I'm concerned about the costs and insurance coverage for my diagnosis and treatment, who can help me?

When deciding on a treatment plan

- How much experience do you have treating this type of cancer?
- What are my [treatment options](#)²? What do you recommend? Why?
- Will I be okay if the cancer is just removed with no other treatment?
- What will treatment be like? Where will it be done?
- What are the risks or side effects from treatment?
- Will I have a scar after treatment?

- How quickly do we need to decide on treatment?
- What should I do to be ready for treatment?

After treatment

- What are the chances of my cancer coming back with the treatment options we have discussed? What will we do if that happens?
- What are my chances of developing another skin cancer?
- Should I take special precautions to avoid the sun? What steps I can take to protect myself?
- What type of [follow-up](#)³ will I need after treatment?
- How will we know if the cancer has come back? What should I watch for?
- Are any of my family members at risk for skin cancer? What should I tell them to do?

Along with these sample questions, be sure to write down some of your own. For instance, you might want more information about recovery times so you can plan your work or activity schedule. Or you may want to ask about second opinions or about [clinical trials](#)⁴ for which you may qualify.

Keep in mind that doctors aren't the only ones who can give you information. Other health care professionals, such as nurses and social workers, can answer some of your questions. To find out more about speaking with your health care team, see [The Doctor-Patient Relationship](#)⁵.

Hyperlinks

1. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/about/what-is-basal-and-squamous-cell.html
2. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/treating.html
3. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/after-treatment/follow-up.html
4. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
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Treating Basal and Squamous Cell Skin Cancer

If you've been diagnosed with basal or squamous cell skin cancer, your treatment team will discuss your options with you. It's important to weigh the benefits of each treatment option against the possible risks and side effects.

How are basal and squamous cell skin cancers treated?

Based on the type and stage of the cancer and other factors, your treatment options may include:

- [Surgery for Basal and Squamous Cell Skin Cancers](#)
- [Local Treatments Other than Surgery for Basal and Squamous Cell Skin Cancers](#)
- [Radiation Therapy for Basal and Squamous Cell Skin Cancers](#)
- [Systemic Chemotherapy for Basal and Squamous Cell Skin Cancers](#)
- [Targeted Therapy for Basal and Squamous Cell Skin Cancers](#)
- [Immunotherapy for Basal and Squamous Cell Skin Cancers](#)

Common treatment approaches

Different approaches might be used to treat basal cell carcinoma, squamous cell carcinoma, actinic keratosis, and Bowen disease. Fortunately, most of these cancers and pre-cancers can be cured with fairly minor surgery or other types of local treatments.

(Other skin cancers, such as [melanoma](#)¹, [lymphoma of the skin](#)², [Merkel cell carcinoma](#)³, [Kaposi sarcoma](#)⁴, and [other sarcomas](#)⁵ are treated differently and are covered elsewhere.)

- [Treating Basal Cell Carcinoma](#)
- [Treating Squamous Cell Carcinoma of the Skin](#)
- [Treating Actinic Keratosis and Bowen Disease](#)

Who treats basal and squamous cell skin cancers?

You might have different types of doctors on your treatment team. Most basal and squamous cell cancers (as well as pre-cancers) are treated by **dermatologists** – doctors who specialize in treating skin diseases.

If the cancer is more advanced, you may be treated by another type of doctor, such as:

- A **surgical oncologist**: a doctor who treats cancer with surgery
- A **medical oncologist**: a doctor who treats cancer with chemotherapy or other medicines
- A **radiation oncologist**: A doctor who treats cancer with radiation therapy

You might have many other specialists on your treatment team as well, including physician assistants, nurse practitioners, nurses, nutrition specialists, social workers, and other health professionals.

- [Health Professionals Associated With Cancer Care⁶](#)

Making treatment decisions

It's important to discuss all of your treatment options, including their goals and possible side effects, with your doctors to help make the decision that best fits your needs. Some important things to consider include:

- The type and location of your skin cancer
- The likelihood that treatment will cure your cancer (or help in some other way)
- Your age and overall health
- Possible side effects of treatment, such as scars or changes in your appearance, and your feelings about them

You might feel that you need to make a decision quickly, but it's important to give yourself time to absorb the information you have just learned. It's also very important to ask questions if there is anything you're not sure about.

If time permits, it is often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more confident about the treatment plan you choose.

- [What Should You Ask Your Health Care Team About Basal and Squamous Cell Skin Cancers?](#)⁷
- [Seeking a Second Opinion](#)⁸

Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the-art cancer treatment. In some cases they may be the only way to get access to newer treatments. They are also the best way for doctors to learn better methods to treat cancer. Still, they're not right for everyone.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials.

- [Clinical Trials](#)⁹

Considering complementary and alternative methods

You may hear about alternative or complementary methods that your doctor hasn't mentioned to treat your cancer or relieve symptoms. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods refer to treatments that are used along with your regular medical care. Alternative treatments are used instead of a doctor's medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be harmful.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision.

- [Complementary and Alternative Medicine](#)¹⁰

Help getting through cancer treatment

Your cancer care team will be your first source of information and support, but there are other resources for help when you need it. Hospital- or clinic-based support services are an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also has programs and services – including rides to treatment, lodging, and more – to help you get through treatment. Call our National Cancer Information Center at 1-800-227-2345 and speak with one of our trained specialists.

- [Find Support Programs and Services in Your Area](#)¹¹

Choosing to stop treatment or choosing no treatment at all

For some people, when treatments have been tried and are no longer controlling the cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.

Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it's important to talk to your doctors and you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

- [If Cancer Treatments Stop Working](#)¹²
- [Palliative or Supportive Care](#)¹³

The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask him or her questions about your treatment options.

Surgery for Basal and Squamous Cell

Skin Cancers

Surgery is a common treatment for basal cell and squamous cell skin cancers. Different surgical techniques can be used. The options depend on the type of skin cancer, how large the cancer is, where it is on the body, and other factors. Most often the surgery can be done in a doctor's office or hospital clinic using a local anesthetic (numbing medicine). For skin cancers with a high risk of spreading, surgery sometimes will be followed by other treatments, such as [radiation](#) or [chemotherapy](#).

Excision

This is similar to an excisional biopsy (see [Tests for Basal and Squamous Cell Skin Cancer](#)¹), but in this case the diagnosis is already known. For this procedure, the skin is first numbed with a local anesthetic. The tumor is then cut out with a surgical knife, along with some surrounding normal skin. The remaining skin is carefully stitched back together, which will leave a scar.

Curettage and electrodesiccation

In this treatment, the doctor removes the cancer by scraping it with a long, thin instrument with a sharp looped edge on one end (called a *curette*). The area is then treated with an electric needle (electrode) to destroy any remaining cancer cells. This process is often repeated once or twice during the same office visit. Curettage and electrodesiccation is a good treatment for superficial (confined to the top layer of skin) basal cell and squamous cell cancers. It will leave a scar.

Mohs surgery (microscopically controlled surgery)

Mohs surgery is sometimes used when there is a high risk the skin cancer will come back after treatment, when the extent of the skin cancer is not known, or when the goal is to save as much healthy skin as possible, such as with cancers near the eye or other critical areas such as the central face, ears or fingers.

The Mohs procedure is done by a surgeon with special training. First, the surgeon removes a very thin layer of the skin (including the tumor) and then checks the removed sample under a microscope. If cancer cells are seen, another layer is removed and examined. This is repeated until the skin samples are free of cancer cells. This is a slow process, often taking several hours, but it means that more normal skin near the tumor can be saved. This can help the area look better after surgery.

Mohs can often offer better outcomes than some other forms of surgery and other treatments. But it's also usually more complex and time-consuming than other methods. In recent years, skin cancer experts have developed guidelines for when it's best to use this technique based on the type and size of skin cancer, where it is on the body, and other important features.

Lymph node surgery

If lymph nodes near a squamous or basal cell skin cancer are enlarged, the doctor might biopsy them to check for cancer cells (see [Tests for Basal and Squamous Cell Skin Cancer²](#)).

Sometimes, many nodes might be removed in a more extensive operation called a *lymph node dissection*. The nodes are then looked at under a microscope for signs of cancer. This type of operation is more extensive than surgery on the skin and is usually done while you are under general anesthesia (in a deep sleep).

[Lymphedema³](#), a condition in which excess fluid collects in the legs or arms, is a possible long-term side effect of a lymph node dissection. If it's severe enough, it can cause skin problems and an increased risk of infections in the limb. Elastic stockings and compression sleeves can be used to help people with this condition.

Skin grafting and reconstructive surgery

After surgery to remove a large basal or squamous cell skin cancer, it may not be possible to stretch the nearby skin enough to stitch the edges of the wound together. In these cases, healthy skin can be taken from another part of the body and grafted over the wound to help it heal and to restore the appearance of the affected area. Other reconstructive surgical procedures can also be helpful in some cases.

Hyperlinks

1. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/detection-diagnosis-staging/how-diagnosed.html
2. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/detection-diagnosis-staging/how-diagnosed.html
3. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/lymphedema.html

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See all references for Basal and Squamous Cell Skin Cancer

(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Local Treatments Other than Surgery for Basal and Squamous Cell Skin Cancers

Several techniques other than surgery can be used to treat basal and squamous cell skin cancers that have not spread to lymph nodes or other parts of the body. Some of these treatments are described as types of surgery since they destroy a targeted area of body tissue. But these techniques don't use scalpels or cut into the skin.

Cryotherapy (cryosurgery)

Cryotherapy is used most often for pre-cancerous conditions such as actinic keratosis and for small basal cell and squamous cell carcinomas.

For this treatment, the doctor applies liquid nitrogen to the tumor to **freeze and kill** the cells. This is often repeated a couple of times in the same office visit. After the dead area of skin thaws, it will swell, blister and crust over.

The wound may have fluid draining from it for a while and take a month or two to heal. It will leave a scar, and the treated area may have less color after treatment.

Photodynamic therapy (PDT)

PDT can be used to treat actinic keratoses. But its exact role in treating basal and squamous cell skin cancers, if any, still needs to be determined.

This treatment uses a special liquid drug that is applied to the skin. The drug collects in the tumor cells over several hours or days, where it is converted to a different chemical that makes the cells very sensitive to certain types of light. A special light source is then

focused on the tumor(s), which kills the cells.

PDT can cause redness and swelling on the skin where it is used. Another possible side effect of PDT is that it can make a person's skin very sensitive to sunlight for some time, so precautions may be needed to avoid severe burns.

To learn more about this technique, see [Photodynamic Therapy](#)¹.

Topical chemotherapy

Chemotherapy uses drugs that kill cancer cells. Topical chemotherapy means that an anti-cancer medicine is **put directly on the skin** (usually in a cream or ointment) rather than being given by mouth or injected into a vein.

5-fluorouracil (5-FU): The drug most often used in topical treatment of actinic keratoses, as well as some basal and squamous cell skin cancers, is 5-FU (with brand names such as Efudex, Carac, and Fluoroplex). It is typically applied to the skin once or twice a day for several weeks.

When put directly on the skin, 5-FU kills tumor cells on or near the skin's surface, but it can't reach cancer cells deeper in the skin or those that have spread to other organs. For this reason, 5-FU is generally used only for pre-cancerous conditions such as actinic keratosis and for some very superficial skin cancers.

Because the drug is only applied to the skin, it doesn't spread throughout the body, so it doesn't cause the same side effects as [systemic chemotherapy](#) (treatment that affects the whole body). But it does make the treated skin red and very sensitive for a few weeks. Other topical medicines can be used to help relieve this, if needed. 5-FU can also make the skin more sensitive to sunlight, so treated areas must be protected from the sun to prevent sunburn for a few weeks after use of this cream.

A very small portion of people have a condition called *DPD deficiency*, which makes it hard for their bodies to break down and get rid of 5-FU. This can result in serious or even life-threatening side effects. If you are applying 5-FU and have any reactions beyond those you were told to expect on your skin, call your doctor or nurse right away.

Diclofenac (Solaraze): A gel containing the drug diclofenac is sometimes used to treat actinic keratoses. This drug is part of a group of drugs called nonsteroidal anti-inflammatory drugs (NSAIDs), which includes aspirin and ibuprofen. The gel is usually applied twice daily for 2 or 3 months. It may cause less severe skin reactions than 5-FU, but it can also take longer to work.

Ingenol mebutate (Picato): This is a newer gel used to treat actinic keratosis that might work more quickly than other topical gels. It is applied to the skin daily for 2 or 3 days. The gel can cause bothersome skin reactions, but these usually start to go away within a week of starting treatment.

Immune response modifiers

Certain drugs can **boost the body's immune response** against the cancer, causing it to shrink and go away.

Imiquimod (Zyclara) is a cream that can be applied to actinic keratoses and some very early basal cell cancers. It causes the immune system to react to the skin lesion and destroy it. It's typically applied at least a few times a week for several weeks, although schedules can vary. Like other topical gels, it can cause severe skin reactions in some people. It can also cause flu-like symptoms.

Interferon is a man-made version of an immune system protein. It can be injected directly into the tumor to boost the immune response against it. It might be an option when surgery isn't possible, but it may not be as effective as other treatments.

Laser surgery

This approach uses a **beam of laser light to vaporize** cancer cells. It's sometimes used for actinic keratosis, squamous cell carcinoma in situ (Bowen disease), and for very superficial basal cell carcinomas (those only on the surface of the skin). It's not yet known if this type of treatment is as effective as standard methods of treatment, and it's not widely used.

Chemical peeling

For this technique, the doctor **applies** a small amount of trichloroacetic acid (TCA) or another chemical **to the skin tumor**, killing the tumor cells over the course of several days. This approach is sometimes used to treat actinic keratosis.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/photodynamic-therapy.html

References

See all references for Basal and Squamous Cell Skin Cancer

(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

Last Medical Review: April 1, 2016 Last Revised: May 10, 2016

Radiation Therapy for Basal and Squamous Cell Skin Cancers

Radiation therapy uses high-energy rays (such as x-rays) or particles (such as photons, electrons, or protons) to kill cancer cells.

When is radiation therapy used?

If a tumor is very large or is on an area of the skin that makes it hard to remove with [surgery](#), radiation therapy may be used as the main treatment. Radiation therapy can also be useful for some patients who, for other health reasons, can't have surgery. Radiation therapy can often cure small basal or squamous cell skin cancers and can delay the growth of more advanced cancers.

Radiation is also useful when combined with other treatments. For example, radiation can be used after surgery as an adjuvant (additional) treatment to kill any small areas of remaining cancer cells that may not have been visible during surgery. This lowers the risk of cancer coming back after surgery. Radiation may also be used to help treat skin cancer that has spread to lymph nodes or other organs.

How is radiation therapy given?

When radiation therapy is used to treat skin cancers, the radiation is focused from outside the body onto the tumor. This is often done with a type of radiation called *electron beam radiation*. It uses a beam of electrons that don't go any deeper than the skin. This helps limit the side effects to other organs and body tissues.

Getting radiation treatment is much like getting an x-ray, but the radiation is stronger

and aimed more precisely at the cancer. The procedure itself is painless. Each treatment lasts only a few minutes, although the setup time – getting you into place for treatment – takes longer.

Possible side effects of radiation

Side effects of radiation are usually limited to the area getting radiation, and can include:

- Skin irritation, ranging from redness to blistering and peeling
- Changes in skin color
- Hair loss in the area being treated
- Damage to saliva-making glands and teeth when treating cancers near these structures

With longer treatment, these side effects may get worse.

After many years, **new skin cancers** sometimes develop in areas previously treated by radiation. For this reason, radiation usually is not used to treat skin cancer in young people. Radiation is also not recommended for people with certain [inherited conditions](#)¹ (such as basal cell nevus syndrome or xeroderma pigmentosum), who may be at higher risk for new cancers, or for people with connective tissue diseases (such as lupus or scleroderma), which radiation might make worse.

To learn more about radiation therapy, see [Radiation Therapy](#)².

Hyperlinks

1. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/causes-risks-prevention/risk-factors.html
2. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/radiation.html

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See all references for Basal and Squamous Cell Skin Cancer
(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

Last Medical Review: April 1, 2016 Last Revised: May 10, 2016

Systemic Chemotherapy for Basal and Squamous Cell Skin Cancers

Systemic chemotherapy (chemo) uses anti-cancer drugs that are injected into a vein or given by mouth. These drugs travel through the bloodstream to all parts of the body. Unlike [topical chemotherapy](#), which is applied to the skin, systemic chemotherapy can attack cancer cells that have spread to lymph nodes and other organs.

If squamous cell carcinoma has spread, chemo drugs such as cisplatin, doxorubicin, 5-fluorouracil (5-FU), capecitabine, topotecan, and etoposide might be used. These drugs are given into a vein (intravenously, or IV), usually once every few weeks. They can often slow the spread of these cancers and relieve some symptoms. In some cases, they might shrink tumors enough so that other treatments such as [surgery](#) or [radiation therapy](#) can be used.

Basal cell carcinoma very rarely reaches an advanced stage, so systemic chemotherapy is not typically used to treat these cancers. Advanced basal cell cancers are more likely to be treated with [targeted therapy](#).

Possible side effects of chemotherapy

Chemo drugs can cause [side effects](#)¹. These depend on the type and dose of drugs given and how long they are used. The side effects of chemo can include:

- [Hair loss](#)²
- [Mouth sores](#)³
- [Loss of appetite](#)⁴
- [Nausea and vomiting](#)⁵
- [Diarrhea or constipation](#)⁶
- Increased risk of [infection](#)⁷ (from having too few white blood cells)
- Easy [bruising or bleeding](#)⁸ (from having too few blood platelets)
- [Fatigue](#)⁹ (from having too few red blood cells)

These side effects usually go away once treatment is finished. Some drugs can have specific effects that are not listed above, so be sure to talk with your cancer care team about what you might expect.

There are often ways to lessen these side effects. For example, drugs can help prevent or reduce nausea and vomiting. Tell your medical team about any side effects or changes you notice while getting chemo so that they can be treated promptly.

To learn more about chemo, see the [Chemotherapy](#)¹⁰ section of our website.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html
2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/hair-loss.html
3. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/mouth-problems/mouth-sores.html
4. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/eating-problems/poor-appetite.html
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9. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fatigue.html
10. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html

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See all references for Basal and Squamous Cell Skin Cancer (www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

Last Medical Review: April 1, 2016 Last Revised: May 10, 2016

Targeted Therapy for Basal and Squamous Cell Skin Cancers

These drugs target parts of skin cancer cells that make them different from normal skin cells. Targeted drugs work differently from standard [chemotherapy](#) drugs. They may work sometimes when chemotherapy drugs don't. They may also have less severe side effects. Doctors are still learning the best way to use these drugs to treat skin cancers.

Hedgehog pathway inhibitors

Examples of targeted drugs include **vismodegib (Erivedge)** and **sonidegib (Odomzo)**, which can be used to treat some advanced or recurrent basal cell skin cancers.

It's very rare for basal cell cancers to reach an advanced stage, but if they do, these cancers can be hard to treat. Most basal cell cancers have mutations (changes) in genes that are part of a cell signaling pathway called *hedgehog*. The hedgehog pathway is crucial for the development of the embryo and fetus and is important in some adult cells, but it can be overactive in basal cell cancer cells. These drugs target a protein in this pathway.

These drugs are capsules taken once a day. For basal cell cancers that have spread or come back after [surgery](#) or [other local treatments](#), these drugs have been shown to help shrink tumors in some people, although it's not yet clear if they help people live longer.

Side effects can include muscle spasms, joint pain, [hair loss](#)², [fatigue](#)³, problems with taste, [poor appetite](#)⁴ and [weight loss](#)⁵, [nausea and vomiting](#)⁶, [itchy skin](#)⁷, [diarrhea](#)⁸, and [constipation](#)⁹. These drugs can also cause women to stop having their periods.

Because the hedgehog pathway affects fetal development, these drugs should not be taken by women who are pregnant or could become pregnant. It is not known if they could harm the fetus if taken by a male partner. Anyone taking these drugs should use reliable birth control during and for some time after treatment.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/hair-loss.html
2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fatigue.html
3. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/eating-problems/poor-appetite.html
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References

See all references for Basal and Squamous Cell Skin Cancer
(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

Last Medical Review: April 1, 2016 Last Revised: May 10, 2016

Immunotherapy for Basal and Squamous Cell Skin Cancers

The immune system normally helps protect the body against germs, and it can also help destroy cancer cells. Immunotherapy is the use of medicines to stimulate a person's own immune system to recognize and destroy cancer cells more effectively. It can be used to treat some people with advanced squamous cell skin cancer.

Immune checkpoint inhibitors

An important part of the immune system is its ability to keep itself from attacking normal cells in the body. To do this, it uses “checkpoints”, which are proteins on immune cells that need to be turned on (or off) to start an immune response.

Cancer cells sometimes take advantage of these checkpoints to avoid being attacked by the immune system. But drugs that target checkpoint proteins, called **checkpoint inhibitors**, can help restore the immune response against cancer cells.

Cemiplimab (Libtayo)

Cemiplimab (Libtayo) is a drug that targets PD-1, a checkpoint protein on T cells (a specific type of immune system cell) that normally helps keep these cells from attacking other cells in the body. By blocking PD-1, this drug boosts the immune response against cancer cells. It can be used in people with advanced squamous cell skin cancer that cannot be cured with [surgery](#) or [radiation therapy](#).

This drug is given as an intravenous (IV) infusion, typically every 3 weeks.

Common side effects can include:

- Feeling tired
- Diarrhea
- Skin rash
- Nausea
- Constipation
- Bone or joint pain
- Loss of appetite

Other, more serious side effects occur less often:

Infusion reactions: Some people might have an infusion reaction while getting this drug. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, wheezing, and trouble breathing.

Autoimmune reactions: This drug works by basically removing one of the safeguards that keeps the immune system from attacking other parts of the body. This can sometimes lead to serious or even life-threatening problems in the lungs, intestines, liver, hormone-making glands, kidneys, or other organs.

It's very important to report any new side effects to your health care team right away. If serious side effects do occur, treatment may need to be stopped and you may get high doses of corticosteroids to suppress your immune system.

To learn more about this type of treatment, see [Immune Checkpoint Inhibitors to Treat Cancer](#)¹.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy/immune-checkpoint-inhibitors.html

References

See all references for Basal and Squamous Cell Skin Cancer (www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Treating Basal Cell Carcinoma

Several types of treatment can be used to remove or destroy basal cell skin cancers. The options depend on factors such as the tumor size and location, and a person's age, general health, and preferences. These cancers very rarely spread to other parts of the body, although they can grow into nearby tissues if not treated.

All of the treatments listed here can be effective. The chance of the cancer coming back (recurring) ranges from less than 5% after Mohs surgery to up to 15% or higher after some of the others, but this depends on the size of the tumor. Small tumors are less likely to recur than larger ones. Even if a tumor does recur, it can often still be treated effectively.

Surgery

Different types of [surgery](#) can be used to treat basal cell cancers.

Curettage and electrodesiccation: This is a common treatment for small basal cell carcinomas. It might need to be repeated to help make sure all of the cancer has been removed.

Excision: Excision (cutting the tumor out) is often used to remove basal cell carcinomas, along with a margin of normal skin.

Mohs surgery: Mohs surgery has the best cure rate for basal cell carcinoma. It's especially useful in treating large tumors, tumors where the edges are not well-defined, tumors in certain locations (such as on or near the nose, eyes, ears, forehead, scalp, fingers, and genital area), and those that have come back after other treatments. However, it's also usually more complex and time-consuming than other methods.

Radiation therapy

[Radiation therapy](#) is often a good option for treating patients who aren't able to have surgery and for treating tumors on the eyelids, nose, or ears – areas that can be hard to treat surgically – especially in older patients where cure may not be as important as control over the long term. It's also sometimes used after surgery if it's not clear that all of the cancer has been removed.

Immune response modifiers, photodynamic therapy, or topical chemotherapy

¹[These treatments](#) are sometimes options for treating very superficial tumors (tumors that have not grown too deeply into the skin). Close follow-up is needed because these treatments do not destroy any cancer cells that have grown deep below the surface.

Cryotherapy

²[Cryotherapy](#) (cryosurgery) can be used for some small basal cell carcinomas, but it's not usually recommended for larger tumors or those on certain parts of the nose, ears, eyelids, scalp, or legs.

Cryotherapy can also be used to treat large tumors in one treatment session to relieve symptoms from the cancer. The site of treatment often takes a month or two to heal.

Targeted therapy for advanced basal cell cancers

In rare cases where basal cell cancer spreads to other parts of the body or can't be cured with surgery or radiation therapy, a [targeted drug](#) such as vismodegib (Erivedge) or sonidegib (Odomzo) can often shrink or slow its growth.

Hyperlinks

References

See all references for Basal and Squamous Cell Skin Cancer
(www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Treating Squamous Cell Carcinoma of the Skin

Most squamous cell skin cancers are found and treated at an early stage, when they can be removed or destroyed with local treatment methods. Small squamous cell cancers can usually be cured with these treatments. Larger squamous cell cancers are harder to treat, and fast-growing cancers have a higher risk of coming back.

In rare cases, squamous cell cancers can spread to lymph nodes or distant parts of the body. If this happens, treatments such as radiation therapy and/or chemotherapy may be needed.

Surgery

Different types of [surgery](#) can be used to treat squamous cell skin cancers.

Excision: Cutting out the tumor, along with a small margin of normal skin, is often used to treat squamous cell cancers.

Curettage and electrodesiccation: This approach is sometimes useful in treating

small (less than 1 cm across), thin squamous cell cancers, but it's not recommended for larger tumors.

Mohs surgery: Mohs surgery has the highest cure rate. It's especially useful for squamous cell cancers larger than 2 cm (about 4/5 inch) across or with poorly defined edges, for cancers that have come back after other treatments, for cancers that are spreading along nerves under the skin, and for cancers on certain areas of the face or genital area. This approach is typically more complex and time-consuming than other types of surgery.

Radiation therapy

[Radiation therapy](#) is often a good option for patients with large cancers, especially in areas where surgery would be hard to do (such as the eyelids, ears, or nose), or for patients who can't have surgery. It's not used as much as the first treatment in younger patients because of the possible risk of long-term problems.

Radiation is sometimes used after surgery (simple excision or lymph node dissection) if all of the cancer was not removed (if the surgical margins were positive), if nerves are involved, or if there is a chance that some cancer may still be left.

Radiation can also be used to treat cancers that have come back after surgery and have become too large or deep to be removed surgically.

Cryotherapy

¹[Cryotherapy](#) (cryosurgery) is used for some early squamous cell cancers, especially in people who can't have surgery, but is not recommended for larger invasive tumors or those on certain parts of the nose, ears, eyelids, scalp, or legs.

Treating advanced squamous cell cancers

Lymph node dissection: [Removing regional \(nearby\) lymph nodes](#) might be recommended for some squamous cell cancers that are very large or have grown deeply into the skin, as well as if the lymph nodes feel enlarged and/or hard. The removed lymph nodes are looked at under a microscope to see if they contain cancer cells. Sometimes, radiation therapy might be recommended after surgery.

Systemic chemotherapy: [Chemotherapy](#) is an option for patients with squamous cell cancer that has spread to lymph nodes or distant organs. Sometimes it's combined with

surgery or radiation therapy.

Immunotherapy: Another option for advanced squamous cell cancers that can't be cured with surgery or radiation therapy might be using an [immunotherapy](#) drug such as cemiplimab (Libtayo).

Hyperlinks

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See all references for Basal and Squamous Cell Skin Cancer

www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html

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Treating Actinic Keratosis and Bowen Disease

Actinic keratosis

Actinic keratosis is often treated because it can turn into squamous cell skin cancer. But because this risk is low, treatments are generally aimed at avoiding scars or other disfiguring marks as much as possible.

Actinic keratosis is often treated with either [cryotherapy or topical creams or gels](#) such as fluorouracil (5-FU), imiquimod, diclofenac, or ingenol mebutate. These treatments destroy the affected area of the epidermis, the outermost layer of the skin, which usually cures actinic keratosis.

Other localized treatments (shave excision, curettage and electrodesiccation, photodynamic therapy, laser surgery, chemical peeling) are also sometimes used.

Bowen disease

Bowen disease (squamous cell carcinoma in situ) is usually treated by [excision](#) (cutting out the tumor). Mohs surgery, [curettage and electrodesiccation](#), [radiation therapy](#), [topical fluorouracil \(5-FU\)](#), and [cryosurgery](#) are other options. Laser surgery or topical therapy may be considered in special situations.

References

See all references for Basal and Squamous Cell Skin Cancer

www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html

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After Basal or Squamous Cell Skin Cancer Treatment

Living as a Cancer Survivor

For many people, cancer treatment often raises questions about next steps as a survivor.

- [Living as a Basal or Squamous Cell Skin Cancer Survivor](#)

Living as a Basal or Squamous Cell Skin Cancer Survivor

For most people with basal or squamous cell skin cancers, [treatment](#)¹ will remove or destroy the cancer. Completing treatment can be both stressful and exciting. You may be relieved to finish treatment, but find it hard not to worry about cancer growing or coming back. (When cancer comes back after treatment, it is called *recurrent cancer* or a *recurrence*.) This is very common if you've had cancer.

For a small number of people with more advanced skin cancers, the cancer may never go away completely. These people may get regular treatment with radiation therapy, chemotherapy, or other treatments to help keep the cancer in check for as long as possible. Learning to live with cancer that does not go away can be difficult and very stressful.

Ask your doctor for a survivorship care plan

Talk with your doctor about developing a survivorship care plan for you. This plan might include:

- A suggested schedule for follow-up exams and tests
- A schedule for other tests you might need in the future, such as early detection (screening) tests for other types of cancer, or tests to look for long-term health effects from your cancer or its treatment
- A list of possible late- or long-term side effects from your treatment, including what to watch for and when you should contact your doctor
- Diet and physical activity suggestions

Follow-up care

If you have completed treatment, your doctors will still want to watch you closely. Along with having the cancer return, people who have had skin cancer are also at high risk for developing another one in a different location, so close follow-up is important.

Your doctor will probably recommend that you [examine your own skin](#)² at least once a month. This includes looking for any changes where the cancer was treated, as well as looking for any new areas of concern in other places. You can also ask someone close to you to watch for new suspicious areas in places that are hard to see.

It's also very important to [protect yourself from getting too much sun](#)³, which can increase your risk of new skin cancers.

Doctor visits and tests

Your schedule for follow-up visits will depend on the type of skin cancer you had and on other factors. Different doctors may recommend different schedules.

- For basal cell cancers, visits are often recommended about every 6 to 12 months.
- For squamous cell cancers, visits are usually more frequent, often every 3 to 6 months for the first few years, followed by longer times between visits.

During your follow-up visits, your doctor will ask about symptoms and examine you for signs of skin cancer. For higher risk cancers, such as squamous cell cancers that had

reached the lymph nodes, the doctor might also order imaging tests such as CT scans. If skin cancer does come back, treatment options depend on the size and location of the cancer, what treatments you've had before, and your overall health.

Follow-up is also needed to check for possible side effects of certain treatments. This is a good time for you to ask your health care team any questions and to discuss any concerns you might have. Almost any cancer treatment can have side effects. Some might last for a few weeks or months, but others can be permanent. Tell your cancer care team about any symptoms or side effects that bother you so they can help you manage them.

Keeping health insurance and copies of your medical records

Even after treatment, it's very important to keep [health insurance](#)⁴. Tests and doctor visits cost a lot, and even though no one wants to think of their cancer coming back, this could happen.

At some point after your cancer treatment, you might find yourself seeing a new doctor who doesn't know about your medical history. It's important to keep copies of your medical records to give your new doctor the details of your diagnosis and treatment. Learn more in [Keeping Copies of Important Medical Records](#)⁵.

Can I lower my risk of cancer coming back or getting new skin cancers?

If you have (or have had) skin cancer, you probably want to know if there are things you can do that might lower your risk of the cancer coming back, or of getting a new skin cancer.

People who have had skin cancer are at higher risk for developing another skin cancer. Because of this, it's important to limit your exposure to UV rays (from the sun or tanning beds – see [Can Basal and Squamous Cell Skin Cancers Be Prevented?](#)⁶) and to continue to examine your skin every month for [signs of possible new skin cancers](#)⁷. Seeing your doctor regularly for skin exams is also important. Skin cancers that are found early are typically much easier to treat than those found at a later stage.

Adopting healthy behaviors such as not smoking, eating well, being active, and staying at a healthy weight might help as well, but no one knows for sure. However, we do know that these types of changes can have positive effects on your health, including lowering your risk for many other types of cancer, as well as other diseases.

If the cancer comes back

If your cancer does come back at some point, your treatment options will depend on where the cancer comes back and what treatments you've had before. If the cancer comes back just on the skin, options might include surgery, radiation therapy, or other types of local treatments. If the cancer comes back in another part of the body, other treatments such as chemotherapy might be needed. For more general information on dealing with a recurrence, see our [Recurrence](#)⁸ section.

Moving on after skin cancer

Some amount of feeling depressed, anxious, or worried is normal after being diagnosed with cancer. Some people are affected more than others. But everyone can benefit from help and support from other people, whether friends and family, religious groups, support groups, professional counselors, or others. Learn more in [Life After Cancer](#)¹⁰.

Hyperlinks

1. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/treating.html
2. www.cancer.org/cancer/skin-cancer/galleries/skin-self-exam-gallery.html
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