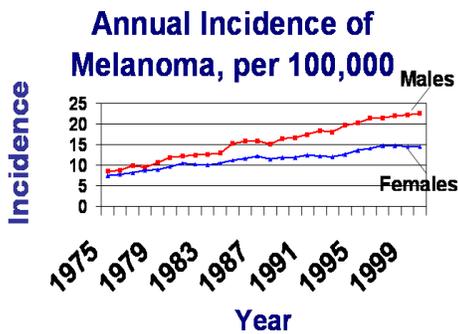




Skin Cancer, the Sun, and Your Child

Skin cancer has been increasing dramatically in the United States over the last century!

There are two main types of skin cancer: melanoma and non-melanoma. Both of these have been rising dramatically over the last several decades. As shown in the graph below, in the United States melanoma rates have almost tripled between 1975 and 2000. Non-melanoma skin cancer rates have also tripled between the 1960's and 1980's. Non-melanoma skin cancer is the most common kind of cancer – it is more common than breast, prostate, lung, or colorectal cancer. Skin cancer rates in Colorado are about 13% higher than the U.S. as a whole.



What is melanoma skin cancer?

- Skin cancer that starts in a pigment (color) cell or a mole.
- Melanoma can occur anywhere on the body.
- About 55,000 people in the United States will be diagnosed each year.
- Melanoma usually occurs in people age 35 or older.

- Lifetime chances of getting melanoma for a white child born in 1998 are about 1 in 46 for a boy and 1 in 68 for a girl – that's up from about 1 in 1,500 in 1935!



Melanoma



Melanoma

How dangerous is melanoma skin cancer?

- When found early, about 97% will be cured.
- When found late, about 50% will be cured.
- About 8,000 Americans die each year from melanoma.
- Melanoma is the most severe kind of skin cancer.

How is melanoma skin cancer treated?

- The affected skin and surrounding skin must be removed by surgery.
- Sometimes, lymph nodes are tested or removed, and sometimes, immunotherapy or chemotherapy is needed.

What is non-melanoma skin cancer?

- Non-melanoma skin cancers are called “basal cell” and “squamous cell” carcinomas.
- Basal and squamous cell carcinomas are the most common types of cancer in the world.
- Non-melanoma skin cancers almost always occur on parts of the body that get lots of sun exposure.
- Non-melanoma skin cancers usually occur in people age 50 or older.
- Over 1 million people in the United States will be diagnosed each year.
- Lifetime chances of getting non-melanoma skin cancer for a white person are about 1 in 4.



Basal Cell Carcinoma



Squamous Cell Carcinoma

How is non-melanoma skin cancer treated?

- Most of the time, the skin that is directly affected can be removed by minor surgery, but sometimes more disfiguring surgery is needed.
- When it is found early, usually less extensive surgery is needed.
- Most cases of non-melanoma skin cancer can be cured. Still, about 2,000 Americans die each year of non-melanoma skin cancer.

For more information about signs of skin cancer and skin cancer treatment, visit the American Academy of Dermatology website: <http://www.aad.org/public/> or call the Cancer Information Service at 1-800-4-CANCER.

Why is skin cancer on the rise?

People are getting more sun, and the sun causes skin cancer.

- Scientists believe that almost all cases of skin cancer are caused by the sun.
- Over the last several decades, people have started spending more time in the sun, and wearing less clothing when they are outside. People today are getting more sun than in previous times.

What happens when you get too much sun?

- Getting a lot of sun in a short period of time, which results in a sunburn, is thought to be especially important in causing melanoma skin cancer.
- Getting a lot of sun over many years is thought to be especially important in causing basal and squamous cell skin cancers.
- Children who get a single severe sunburn have a 2 times higher risk of developing melanoma skin cancer later in life.
- Even though most skin cancer occurs in adults, most of the damage leading to skin cancer happens during childhood.



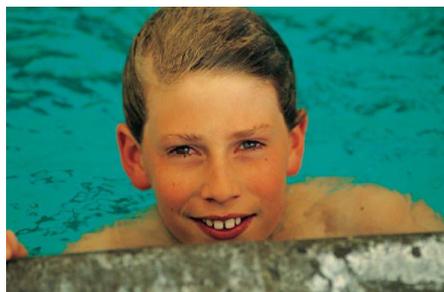
How does the sun cause skin cancer?

- Ultraviolet (UV) light in the rays of the sun can cause damage to the DNA of the skin cells. This can affect the growth and division of the skin cells and result in cancer.



What else does the sun cause?

- **Wrinkling:** Dermatologists say that if someone was *never* in the sun, they would *never* get wrinkles.
- **Tanning:** Tanning is a sign of skin damage. Skin cells that have gotten too much sun start producing more melanin, which makes the skin tan colored. The melanin protects the skin a little from future sunburns, but is a direct response to damage to the skin.
- **Freckles:** Freckles are also a result of sunlight. Freckles result when the skin cells produce more melanin in patches rather than consistently like a tan.
- **Moles** (also called “nevi” [nee-vi]): Many, but not all moles are caused by the sun. A mole is formed when the sun causes a certain type of skin cell called a melanocyte (mel-AN-oh-site) to divide and form a spot. Moles have definite borders and are usually dark brown or black, but sometimes they have the same color as normal skin, especially in lighter skinned people. Moles may be raised, or they can be flat. Many cases of melanoma start in a mole.



Who gets skin cancer?

Skin cancer is much more common in people who:

- Have light colored skin, blue or green eyes, and light colored hair
- Have a lot of moles
- Have freckles
- Get sunburned easily and do not tan much when in the sun
- Have others in their family, such as a father, mother, sister, brother or child, who have had skin cancer

What You Should Do to Reduce Your Child's Chance of Getting Skin Cancer:

Limit time outside between 10 a.m. & 3 p.m.

When outdoors:

- ✓ Cover up your child with a hat, a long-sleeved shirt, and long pants made of light-weight fabric.
- ✓ Keep your child in the shade.
- ✓ Thickly apply sunscreen with SPF 15 or higher to all exposed skin.
- ✓ Have your child wear sunglasses that have 100% UV protection.

Coming up in the next newsletter—the answer to the question...

What is your child's risk for skin cancer?



What are your child's chances of getting skin cancer as an adult?

Chances of getting

skin cancer are determined mostly by two things: **genetics and sun exposure**. **Genetics** are the biological characteristics that parents pass down to their children. Genetics determine:

- Skin color
- Hair color
- Eye color
- How easily a child gets sunburned and tanned
- Whether a child has a tendency to develop freckles and moles
- Family history of skin cancer

Together with a child's genetic background, **sun exposure** determines chances of getting skin cancer.

- Children who spend more time in the sun without protection are more likely to get skin cancer as an adult.

In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, these are: **a family history of skin cancer and a tendency to develop freckles**.

Families and skin cancer



- Children who have a family member who has had skin cancer are more likely to get skin cancer themselves someday.
- Having a close blood relative, that is, a parent, child, brother or sister who has had skin cancer can make the risk of getting skin cancer **8 times greater** compared to someone without skin cancer in their family.

Why is skin cancer more likely in someone with skin cancer in their family?

There are three reasons that skin cancer might "run" in families.

1. People in the same family tend to have similar skin. Light colored skin that tends to sunburn rather than tan, makes a person at higher risk for skin cancer.
2. People in the same family may have similar patterns of moles and freckling, and having lots of moles or freckles also increases the chances of getting skin cancer.

3. People in the same family tend to like to do the same kinds of things, and this may include doing lots of outdoor activities. Activities such as hiking, biking and skiing are enjoyed by many Coloradans! A father who does lots of things outside without sun protection is at higher risk for getting skin cancer, and if his child also does lots of things outside without sun protection, the child will also be at higher risk.



A Parent's Perspective

A mother from Parker shares her concern for her daughter Melanie:

"My father passed away last year from melanoma. I may be at high risk for skin cancer because of my father, and my daughter may be at high risk for skin cancer because of me. It is more important to me now than ever to protect her from getting too much sun."

Kids who have freckles have a higher risk of skin cancer



- Children who get freckles are at higher risk for getting skin cancer some day. The more freckles a child has, the greater the risk. The risk could be as much as **3 times higher** for a child with lots of freckles compared to a child with no freckles.
- Freckles are caused by sun exposure, and they tend to come out in the summer and fade in the winter. When certain pigment cells in the skin are exposed to UV light from the sun, they make more pigment (color), which results in freckles.
- Freckles are most likely to appear on children with lighter skin who tend to burn easily in the sun. Freckles tend to run in families.
- Both freckles and skin cancer can be prevented by staying out of the sun, covering up, and wearing sunscreen.

Myth or Fact?

"I have freckles because my mom has freckles."



Freckles are caused by two things: **genetics** and **sun exposure**. Children tend to have skin that is like their parents' skin. So, if one of their parents has freckles, they may get freckles too. But, freckles will stay hidden in the skin unless they get sunlight. The sunlight stimulates the freckle cells to produce pigment (color). So, children have freckles both because one or both of their parents has freckles and because they spend time in the sun. If a child's skin is protected from the sun using the tips in the green box, the freckles may stay hidden. If the freckles stay hidden, the child will be at lower risk for skin cancer.

Personal story

"I have fair skin with freckles, blue eyes and, as a youngster, I had red hair. I grew up in Florida and went to summer camp five or six times. I regularly became sunburned, once so badly that I literally spent a full week in bed in pain. I am paying the price now with wrinkled skin, pre-cancers and skin cancers."

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In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, these are: **a family history of skin cancer and your child's skin color, hair color, or eye color.**

Families and skin cancer



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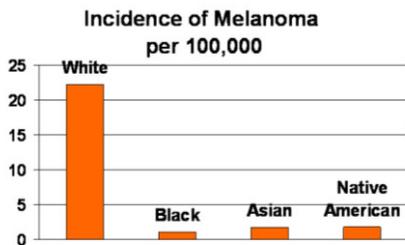
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Light-skinned people have the highest rates of skin cancer in the world.

White people have the highest rates of skin cancer. Whites in the U.S. have an **18 times higher** lifetime chance of developing melanoma (the most deadly kind of skin cancer) than those with black skin. Non-melanoma skin cancers (basal and squamous cell cancers) are also much more likely in white-skinned people compared to other racial groups.



Blonde, red, or light brown hair increases the risk of skin cancer.

Compared to those with black hair, people with light brown hair have about **double the risk** of getting skin cancer, people with blonde hair have about **three times the risk**, and those with red hair have about **four times the risk** of developing skin cancer some day.



Children with blue or green eyes are more likely to get skin cancer

Children with blue eyes or green eyes are about **two times** more likely to get skin cancer compared to children with brown or black eyes.

Why are skin, hair and eye color related to skin cancer?

The color of skin is like a natural sunscreen. It absorbs harmful UV rays of light from the sun. **People with less color in their skin have less natural protection from the sun, and have higher chances of getting skin cancer.** Hair color and eye color often go along with skin color. Those with the lightest skin are more likely to have blonde, red or light brown hair, and more likely to have blue or green eyes. Light skinned people tend to get sunburns more easily, which damages their skin and can lead to skin cancer.

Personal story

"I have fair skin with freckles, blue eyes and, as a youngster, I had red hair. I grew up in Florida and went to summer camp five or six times. I regularly became sunburned, once so badly that I literally spent a full week in bed in pain. I am paying the price now with wrinkled skin, pre-cancers and skin cancers."

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Myth or Fact?



"It's good if a child gets a tan because it protects them from sunburns and skin damage that could later lead to skin cancer."

This is a **MYTH**. Tanning is a sign of

skin damage, just like a sunburn, and like a sunburn, tanning increases the risk of skin cancer. A tan does provide a little protection against sunburn, but not nearly the amount of protection that sunscreen provides. **Some children, especially those with lighter skin, just don't tan, and they can get a lot of sunburns while trying to get a tan!** The best advice is to protect your child's skin from burning or tanning using the recommendations in the green box.

What You Should Do to Reduce Your Child's Chance of Getting Skin Cancer:

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How to lower your child's risk of skin cancer by limiting time in the sun



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- Family history of skin cancer

Together with a child's genetic background, **sun exposure** determines chances of getting skin cancer.

- Children who spend more time in the sun without protection are more likely to get skin cancer as an adult.

In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, these are: **a family history of skin cancer and your child gets sunburned easily and doesn't tan much.**

Families and skin cancer



- Children who have a family member who has had skin cancer are more likely to get skin cancer themselves someday.
- Having a close blood relative, that is, a parent, child, brother or sister who has had skin cancer can make the risk of getting skin cancer **8 times greater** compared to someone without skin cancer in their family.

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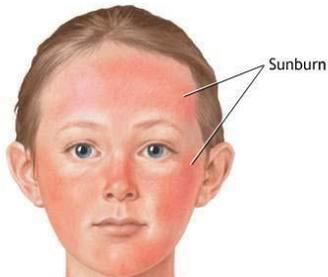
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Sunburns and tans

- How a person's skin reacts to being in the sun is determined by his or her genetics. A sunburn occurs when UV light causes the skin to become inflamed. A tan occurs when UV light causes the skin to produce melanin, the pigment that gives skin its color.
- Children who burn easily and tan poorly are **2 – 3 times** more likely to get skin cancer when they become adults, compared to children who tan more easily. Children who have fair skin and lighter colors of hair are more likely to burn easily.
- Studies have shown that having sunburns increases the risk for skin cancer. A severe sunburn is a sunburn that causes severe pain, blistering, or peeling of the skin. Having one or two severe sunburns may **double the risk** for skin cancer. People who have 3 or more severe sunburns may have **6 times the risk** of getting skin cancer.



Check your child for signs of a sunburn

- It takes a few hours for a sunburn to appear, so your child may look fine when he or she is outside. Later, your child may show the redness, tenderness, and warmth of the skin that are signs of a sunburn.
- If you notice a sunburn starting while you are still out in the sun, cover up or go inside immediately!

What to do if your child gets a sunburn

- Once you see the sunburn, it's too late to stop the damage that may later cause skin cancer. But there are still ways that you can make your child feel better. Sunburns can be very painful.
- Over-the-counter pain medicines, such as ibuprofen (Advil or Motrin), can reduce the inflammation and the pain, but only if taken within 24 hours of the sun exposure that caused the burn.
- A cool bath may help, but **do not** put ice on the burn.
- Lotions can be used to keep the skin moist. **Don't** use petroleum jelly (Vaseline), as it holds in the heat.
- Topical anesthetics, such as Benzocaine, don't provide relief because they don't get absorbed into the skin.
- Be sure your child drinks lots of fluids.

Myth or Fact?



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This is a **MYTH**.

Tanning is a sign of skin damage, just like a sunburn, and like a sunburn, tanning increases the risk of skin cancer. A tan does provide a little protection against sunburn, but not nearly the amount of protection that sunscreen provides. **Some children, especially those with lighter skin, just don't tan, and they can get a lot of sunburns while trying to get a tan!** The best advice is to protect your child's skin from burning or tanning using the recommendations in the green box.

Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun

Personal story

"I have fair skin with freckles, blue eyes and, as a youngster, I had red hair. I grew up in Florida and went to summer camp five or six times. I regularly became sunburned, once so badly that I literally spent a full week in bed in pain. I am paying the price now with wrinkled skin, pre-cancers and skin cancers."

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Together with a child's genetic background, **sun exposure** determines chances of getting skin cancer.

- Children who spend more time in the sun without protection are more likely to get skin cancer as an adult.

In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, your child has a **family history of skin cancer**.

Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun

Families and skin cancer



- Children who have a family member who has had skin cancer are more likely to get skin cancer themselves someday.
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Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun

Kids who have freckles have a higher risk of skin cancer



- Children who get freckles are at higher risk for getting skin cancer some day. The more freckles a child has, the greater the risk. The risk could be as much as **3 times higher** for a child with lots of freckles compared to a child with no freckles.
- Freckles are caused by sun exposure, and they tend to come out in the summer and fade in the winter. When certain pigment cells in the skin are exposed to UV light from the sun, they make more pigment (color), which results in freckles.
- Freckles are most likely to appear on children with lighter skin who tend to burn easily in the sun. Freckles tend to run in families.
- Both freckles and skin cancer can be prevented by staying out of the sun, covering up, and wearing sunscreen.

Myth or Fact?



"I have freckles because my mom has freckles."

Freckles are caused by two things: **genetics and sun exposure**.

Children tend to have skin that is like their parents' skin. So, if one of their parents has freckles, they may get freckles too. But, freckles will stay hidden in the skin unless they get sunlight. The sunlight stimulates the freckle cells to produce pigment (color). So, children have freckles both because one or both of their parents has freckles and because they spend time in the sun. If a child's skin is protected from the sun using the tips in the box, the freckles may stay hidden. If the freckles stay hidden, the child will be at lower risk for skin cancer.

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In this newsletter, we'll give you information about your child's risk factors. Based on the information that we have, your child is black or African American, Asian American, or Native American.

Children of these racial groups have a much lower chance of getting skin cancer over their lifetimes compared to other children.

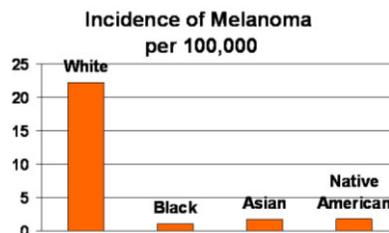


Risk for skin cancer is affected by skin color



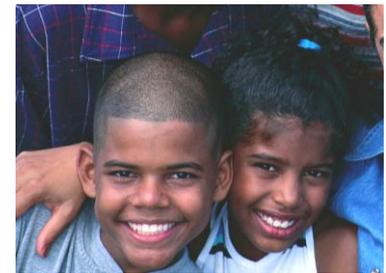
People of black, African American, Asian, or Native American background have much lower risk of skin cancer

than people of white background. As shown in the graph below, blacks, Asians, and Native Americans have a risk of getting melanoma that is about 1/10 to 1/20 of the risk of white people. Non-white children born in 1998 have about a 1 in 1000 chance of getting melanoma some time in their lives. For white children born the same year, the chance is about 1 in 50.



The natural color in skin is like a natural sunscreen. It absorbs harmful ultraviolet (UV) rays of light and protects skin cells from damage. Usually, the darker a person's skin, the lower their chance of getting skin cancer.

Even though darker skin gives protection from skin cancer, the UV light from the sun still causes some damage to the skin. So, using good sun protection is still important.



Some skin cancer is not caused by the sun

When people with darker skin get skin cancer, it is usually not because of exposure to the sun, although it can be. Asian and black people are more likely than white people to get a type of melanoma that appears inside the mouth, on the soles of the feet, and on the palms of the hands. This is not caused by the sun. All people, regardless of their racial background, are more likely to get skin cancer in areas of skin where they have had a severe burn that left scars, such as from fire or very hot water.

Coming up in the next newsletter...

Ways to protect your child from the sun

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- Children who spend more time in the sun without protection are more likely to get skin cancer as an adult.

In this newsletter, we'll give you information about your child's risk factors. Based on the information that we have, your child has:

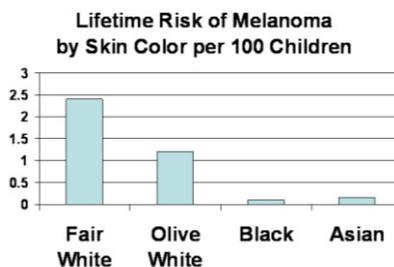
- Medium or dark skin color
- Brown, black or hazel eyes
- Brown or black hair
- Does not easily get sunburns
- Does not have a family history of skin cancer
- Does not have a lot of moles or freckles

Children with these characteristics have a lower chance of getting skin cancer than children who have lighter coloring or other risk factors. However, they still have a lifetime chance of about 1 in 100 of getting melanoma someday.

Risk for skin cancer is affected by skin color

The natural color in skin is like a natural sunscreen. It absorbs harmful ultraviolet (UV) rays of light and protects skin cells from damage. Usually, the darker a person's skin, the lower their chance of getting skin cancer.

White children have about a 1 in 50 chance of getting melanoma some time in their lives. Darker skinned white children have about half the risk (1 in 100) of getting melanoma compared to fair skinned white children. But, darker skinned white children still have a much higher risk than black, Asian, or Native American children.



Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun



Children growing up in Colorado are at higher risk for skin cancer

Because of Colorado's sunny climate and high altitude, children get exposed to more of the dangerous UV light that comes from the sun.

Even though darker skin gives some protection from skin cancer, using good sun protection is still important. Your child's chances of getting skin cancer will be lower if you do the things in the box below.

What You Should Do to Reduce Your Child's Chance of Getting Skin Cancer:

Limit time outside between 10 a.m. & 3 p.m.

When outdoors:

- ✓ Cover up your child with a hat, a long-sleeved shirt, and long pants made of light-weight fabric.
- ✓ Keep your child in the shade.
- ✓ Thickly apply sunscreen with SPF 15 or higher to all exposed skin.
- ✓ Have your child wear sunglasses that have 100% UV protection.



What are your child's chances of getting skin cancer as an adult?

Chances of getting

skin cancer are determined mostly by two things: **genetics and sun exposure**. **Genetics** are the biological characteristics that parents pass down to their children.

Genetics determine:

- Skin color
- Hair color
- Eye color
- How easily a child gets sunburned and tanned
- Whether a child has a tendency to develop freckles and moles
- Family history of skin cancer

Together with a child's genetic background, **sun exposure** determines chances of getting skin cancer.

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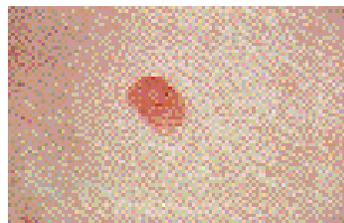
In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, these are: **a tendency to develop moles and a family history of skin cancer**.

What are moles?

- Moles are brown or black spots on the skin, but sometimes they can be the same color as normal skin. They are different than freckles. Freckles usually come in patches and don't have clear edges. Moles do not come in patches and have very clear edges. Moles can be raised, but they aren't always. A mole is also called a nevus (nee-vus).



- Melanocytes (mel-AN-oh-sites) are the cells in the skin that make the pigment that gives the skin its color. A mole is formed when a melanocyte cell is damaged and changes into a mole cell (also called a nevus cell). The mole cell then divides to form a cluster of mole cells.
- Moles begin as tiny specks. They usually get bigger as the body grows.
- Moles can appear anywhere on the body – both in areas that get sun and areas that do not get sun. But, moles are more common on sun exposed parts of the body.
- Moles are very common and most everyone gets them.



Who gets moles?

- Only about 1 in 100 children is born with a mole. Children start getting other moles when they are about 6-12 months old.
- People get most of their moles in early childhood and at puberty, and then the number of moles stays about the same. Moles start to disappear in old age.
- A child's genetic background determines whether or not he will *tend to get moles*.
- *How many moles* a child gets will usually be affected by how much sun he gets. The most common moles develop because of exposure to the sun. **Children who have a genetic tendency to get moles will get many more moles if they are out in the sun a lot.**

Moles and skin cancer

- Melanoma is the most dangerous kind of skin cancer and kills about 8,000 Americans each year.
- Melanoma occurs when melanocyte cells grow abnormally and become cancer.
- Melanoma can occur in an existing mole, or in skin that appears to be normal.
- The strongest risk factor for melanoma is the number of moles a person has. A person with a high number of moles has a **6 times higher lifetime risk** of getting melanoma compared to a person with a lower number of moles.
- Melanoma almost never develops before the teen years. Children who have lots of moles should begin having their moles checked by a doctor when they are teenagers.

The importance of moles in children

- Because most moles appear during childhood and because the number of moles that an adult has is strongly related to his chances of getting melanoma, doctors believe that children who have a high number of moles are at much higher risk of getting melanoma when they are adults.
- In the Colorado Kids Sun Care Program, we have been studying the number of moles on children age 3-6 years old. At age 6, the average number of moles on the children in the Colorado Kids Sun Care Program was 22 moles. Although not much is known about how the number of moles in childhood is related to getting melanoma as an adult, children who have *many* more than 22 moles are at increased risk of getting melanoma as adults. Your child seems to be in this group of children with a high number of moles. Be sure to read the next two newsletters to learn more about what you can do to lower your child's risk of getting melanoma and other types of skin cancer.



Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun

Families and skin cancer



- Children who have a family member who has had skin cancer are more likely to get skin cancer themselves someday.
- Having a close blood relative, that is, a parent, child, brother or sister who has had skin cancer can make the risk of getting skin cancer 8 times greater compared to someone without skin cancer in their family.

Why is skin cancer more likely in someone with skin cancer in their family?

There are three reasons that skin cancer might "run" in families.

1. People in the same family tend to have similar skin. Light colored skin that tends to sunburn rather than tan, makes a person at higher risk for skin cancer.
2. People in the same family may have similar patterns of moles and freckling, and having lots of moles or freckles also increases the chances of getting skin cancer.
3. People in the same family tend to like to do the same kinds of things, and this may include doing lots of outdoor activities. Activities such as hiking, biking and skiing are enjoyed by many Coloradans! A father who does lots of things outside without sun protection is at higher risk for getting skin cancer, and if his child also does lots of things outside without sun protection, the child will also be at higher risk.



A Parent's Perspective

A mother from Parker shares her concern for her daughter Melanie:

"My father passed away last year from melanoma. I may be at high risk for skin cancer because of my father, and my daughter may be at high risk for skin cancer because of me. It is more important to me now than ever to protect her from getting too much sun."



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Limit time outside between 10 a.m. & 3 p.m.

When outdoors:

- ✓ Cover up your child with a hat, a long-sleeved shirt, and long pants made of light-weight fabric.
- ✓ Keep your child in the shade.
- ✓ Thickly apply sunscreen with SPF 15 or higher to all exposed skin.
- ✓ Have your child wear sunglasses that have 100% UV protection.



What are your child's chances of getting skin cancer as an adult?

Chances of getting

skin cancer are determined mostly by two things: **genetics and sun exposure**. **Genetics** are the biological characteristics that parents pass down to their children. Genetics determine:

- Skin color
- Hair color
- Eye color
- How easily a child gets sunburned and tanned
- Whether a child has a tendency to develop freckles and moles
- Family history of skin cancer

Together with a child's genetic background, **sun exposure** determines chances of getting skin cancer.

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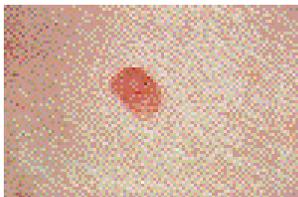
In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, these are **a tendency to develop moles and freckles**.

What are moles?

- Moles are brown or black spots on the skin, but sometimes they can be the same color as normal skin. They are different than freckles. Freckles usually come in patches and don't have clear edges. Moles do not come in patches and have very clear edges. Moles can be raised, but they aren't always. A mole is also called a nevus (nee-vus).



- Melanocytes (mel-AN-oh-sites) are the cells in the skin that make the pigment that gives the skin its color. A mole is formed when a melanocyte cell is damaged and changes into a mole cell (also called a nevus cell). The mole cell then divides to form a cluster of mole cells.
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- Moles can appear anywhere on the body – both in areas that get sun and areas that do not get sun. But, moles are more common on sun exposed parts of the body.
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Who gets moles?

- Only about 1 in 100 children is born with a mole. Children start getting other moles when they are about 6-12 months old.
- People get most of their moles in early childhood and at puberty, and then the number of moles stays about the same. Moles start to disappear in old age.
- A child's genetic background determines whether or not he will *tend to get moles*.
- *How many moles* a child gets will usually be affected by how much sun he gets. The most common moles develop because of exposure to the sun. **Children who have a genetic tendency to get moles will get many more moles if they are out in the sun a lot.**

Moles and skin cancer

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- Melanoma occurs when melanocyte cells grow abnormally and become cancer.
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- The strongest risk factor for melanoma is the number of moles a person has. A person with a high number of moles has a **6 times higher lifetime risk** of getting melanoma compared to a person with a lower number of moles.
- Melanoma almost never develops before the teen years. Children who have lots of moles should begin having their moles checked by a doctor when they are teenagers.

The importance of moles in children

- Because most moles appear during childhood and because the number of moles that an adult has is strongly related to his chances of getting melanoma, doctors believe that children who have a high number of moles are at much higher risk of getting melanoma when they are adults.
- In the Colorado Kids Sun Care Program, we have been studying the number of moles on children age 3-6 years old. At age 6, the average number of moles on the children in the Colorado Kids Sun Care Program was 22 moles. Although not much is known about how the number of moles in childhood is related to getting melanoma as an adult, children who have *many* more than 22 moles are at increased risk of getting melanoma as adults. Your child seems to be in this group of children with a high number of moles. Be sure to read the next two newsletters to learn more about what you can do to lower your child's risk of getting melanoma and other types of skin cancer.

Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun

Kids who have freckles have a higher risk of skin cancer



- Children who get freckles are at higher risk for getting skin cancer some day. The more freckles a child has, the greater the risk. The risk could be as much as 3 times higher for a child with lots of freckles compared to a child with no freckles.
- Freckles are caused by sun exposure, and they tend to come out in the summer and fade in the winter. When certain pigment cells in the skin are exposed to UV light from the sun, they make more pigment (color), which results in freckles.
- Freckles are most likely to appear on children with lighter skin who tend to burn easily in the sun. Freckles tend to run in families.
- Both freckles and skin cancer can be prevented by staying out of the sun, covering up, and wearing sunscreen.

Myth or Fact?

"I have freckles because my mom has freckles."



Freckles are caused by two things: **genetics** and **sun exposure**. Children tend to have skin that is like their parents' skin. So, if one of their parents has freckles, they may get freckles too. But, freckles will stay hidden in the skin unless they get sunlight. The sunlight stimulates the freckle cells to produce pigment (color). So, children have freckles both because one or both of their parents has freckles and because they spend time in the sun. If a child's skin is protected from the sun using the tips in the green box, the freckles may stay hidden. If the freckles stay hidden, the child will be at lower risk for skin cancer.

What You Should Do to Reduce Your Child's Chance of Getting Skin Cancer:

Limit time outside between 10 a.m. & 3 p.m.

When outdoors:

- ✓ Cover up your child with a hat, a long-sleeved shirt, and long pants made of light-weight fabric.
- ✓ Keep your child in the shade.
- ✓ Thickly apply sunscreen with SPF 15 or higher to all exposed skin.
- ✓ Have your child wear sunglasses that have 100% UV protection.



What are your child's chances of getting skin cancer as an adult?

Chances of getting

skin cancer are determined mostly by two things: **genetics and sun exposure**. **Genetics** are the biological characteristics that parents pass down to their children.

Genetics determine:

- Skin color
- Hair color
- Eye color
- How easily a child gets sunburned and tanned
- Whether a child has a tendency to develop freckles and moles
- Family history of skin cancer

Together with a child's genetic background, **sun exposure** determines chances of getting skin cancer.

- Children who spend more time in the sun without protection are more likely to get skin cancer as an adult.

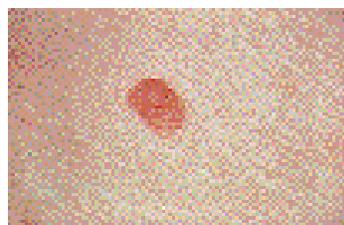
In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, these are: **a tendency to develop moles, and your child's skin color, hair color, or eye color.**

What are moles?

- Moles are brown or black spots on the skin, but sometimes they can be the same color as normal skin. They are different than freckles. Freckles usually come in patches and don't have clear edges. Moles do not come in patches and have very clear edges. Moles can be raised, but they aren't always. A mole is also called a nevus (nee-vus).



- Melanocytes (mel-AN-oh-sites) are the cells in the skin that make the pigment that gives the skin its color. A mole is formed when a melanocyte cell is damaged and changes into a mole cell (also called a nevus cell). The mole cell then divides to form a cluster of mole cells.
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- Moles are very common and most everyone gets them.



Who gets moles?

- Only about 1 in 100 children is born with a mole. Children start getting other moles when they are about 6-12 months old.
- People get most of their moles in early childhood and at puberty, and then the number of moles stays about the same. Moles start to disappear in old age.
- A child's genetic background determines whether or not he will *tend to get moles*.
- *How many moles* a child gets will usually be affected by how much sun he gets. The most common moles develop because of exposure to the sun. **Children who have a genetic tendency to get moles will get many more moles if they are out in the sun a lot.**

Moles and skin cancer

- Melanoma is the most dangerous kind of skin cancer and kills about 8,000 Americans each year.
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- The strongest risk factor for melanoma is the number of moles a person has. A person with a high number of moles has a **6 times higher lifetime risk** of getting melanoma compared to a person with a lower number of moles.
- Melanoma almost never develops before the teen years. Children who have lots of moles should begin having their moles checked by a doctor when they are teenagers.

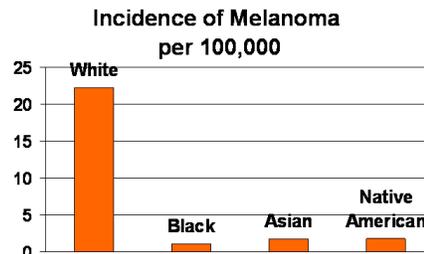
The importance of moles in children

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- In the Colorado Kids Sun Care Program, we have been studying the number of moles on children age 3-6 years old. At age 6, the average number of moles on the children in the Colorado Kids Sun Care Program was 22 moles. Although not much is known about how the number of moles in childhood is related to getting melanoma as an adult, children who have *many* more than 22 moles are at increased risk of getting melanoma as adults. Your child seems to be in this group of children with a high number of moles. Be sure to read the next two newsletters to learn more about what you can do to lower your child's risk of getting melanoma and other types of skin cancer.



Light-skinned people have the highest rates of skin cancer in the world.

White people have the highest rates of skin cancer. Whites in the U.S. have an 18 times higher lifetime chance of developing melanoma (the most deadly kind of skin cancer) than those with black skin. Non-melanoma skin cancers (basal and squamous cell cancers) are also much more likely in white-skinned people compared to other racial groups.



Blonde, red, or light brown hair increases the risk of skin cancer.

Compared to those with black hair, people with light brown hair have about double the risk of getting skin cancer, people with blonde hair have about three times the risk, and those with red hair have about four times the risk of developing skin cancer some day.



Children with blue or green eyes are more likely to get skin cancer

Children with blue eyes or green eyes are about two times more likely to get skin cancer compared to children with brown or black eyes.

Why are skin, hair and eye color related to skin cancer?

The color of skin is like a natural sunscreen. It absorbs harmful UV rays of light from the sun. People with less color in their skin have less natural protection from the sun, and have higher chances of getting skin cancer. Hair color and eye color often go along with skin color. Those with the lightest skin are more likely to have blonde, red or light brown hair, and more likely to have blue or green eyes. Light skinned people tend to get sunburns more easily, which damages their skin and can lead to skin cancer.

What You Should Do to Reduce Your Child's Chance of Getting Skin Cancer:

Limit time outside between 10 a.m. & 3 p.m.

When outdoors:

- ✓ Cover up your child with a hat, a long-sleeved shirt, and long pants made of light-weight fabric.
- ✓ Keep your child in the shade.
- ✓ Thickly apply sunscreen with SPF 15 or higher to all exposed skin.
- ✓ Have your child wear sunglasses that have 100% UV protection.

Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun



What are your child's chances of getting skin cancer as an adult?

Chances of getting

skin cancer are determined mostly by two things: **genetics and sun exposure**. **Genetics** are the biological characteristics that parents pass down to their children.

Genetics determine:

- Skin color
- Hair color
- Eye color
- How easily a child gets sunburned and tanned
- Whether a child has a tendency to develop freckles and moles
- Family history of skin cancer

Together with a child's genetic background, **sun exposure** determines chances of getting skin cancer.

- Children who spend more time in the sun without protection are more likely to get skin cancer as an adult.

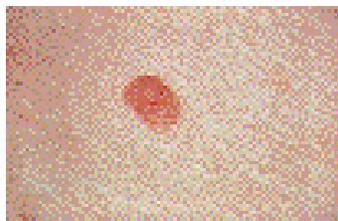
In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, these are: **a tendency to develop moles and your child gets sunburned easily and doesn't tan much.**

What are moles?

- Moles are brown or black spots on the skin, but sometimes they can be the same color as normal skin. They are different than freckles. Freckles usually come in patches and don't have clear edges. Moles do not come in patches and have very clear edges. Moles can be raised, but they aren't always. A mole is also called a nevus (nee-vus).



- Melanocytes (mel-AN-oh-sites) are the cells in the skin that make the pigment that gives the skin its color. A mole is formed when a melanocyte cell is damaged and changes into a mole cell (also called a nevus cell). The mole cell then divides to form a cluster of mole cells.
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- Moles can appear anywhere on the body – both in areas that get sun and areas that do not get sun. But, moles are more common on sun exposed parts of the body.
- Moles are very common and most everyone gets them.



Who gets moles?

- Only about 1 in 100 children is born with a mole. Children start getting other moles when they are about 6-12 months old.
- People get most of their moles in early childhood and at puberty, and then the number of moles stays about the same. Moles start to disappear in old age.
- A child's genetic background determines whether or not he will *tend to get moles*.
- *How many moles* a child gets will usually be affected by how much sun he gets. The most common moles develop because of exposure to the sun. **Children who have a genetic tendency to get moles will get many more moles if they are out in the sun a lot.**

Moles and skin cancer

- Melanoma is the most dangerous kind of skin cancer and kills about 8,000 Americans each year.
- Melanoma occurs when melanocyte cells grow abnormally and become cancer.
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- The strongest risk factor for melanoma is the number of moles a person has. A person with a high number of moles has a **6 times higher lifetime risk** of getting melanoma compared to a person with a lower number of moles.
- Melanoma almost never develops before the teen years. Children who have lots of moles should begin having their moles checked by a doctor when they are teenagers.

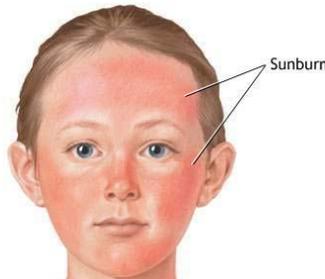
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Sunburns and tans

- How a person's skin reacts to being in the sun is determined by his or her genetics. A sunburn occurs when UV light causes the skin to become inflamed. A tan occurs when UV light causes the skin to produce melanin, the pigment that gives skin its color.
- Children who burn easily and tan poorly are 2 – 3 times more likely to get skin cancer when they become adults, compared to children who tan more easily. Children who have fair skin and lighter colors of hair are more likely to burn easily.
- Studies have shown that having sunburns increases the risk for skin cancer. A severe sunburn is a sunburn that causes severe pain, blistering, or peeling of the skin. Having one or two severe sunburns may double the risk for skin cancer. People who have 3 or more severe sunburns may have 6 times the risk of getting skin cancer.



Check your child for signs of a sunburn

- It takes a few hours for a sunburn to appear, so your child may look fine when he or she is outside. Later, your child may show the redness, tenderness, and warmth of the skin that are signs of a sunburn.
- If you notice a sunburn starting while you are still out in the sun, cover up or go inside immediately!

Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun

What to do if your child gets a sunburn

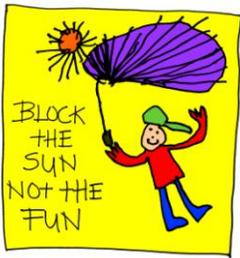
- Once you see the sunburn, it's too late to stop the damage that may later cause skin cancer. But there are still ways that you can make your child feel better. Sunburns can be very painful.
- Over-the-counter pain medicines, such as ibuprofen (Advil or Motrin), can reduce the inflammation and the pain, but only if taken within 24 hours of the sun exposure that caused the burn.
- A cool bath may help, but *do not* put ice on the burn.
- Lotions can be used to keep the skin moist. *Don't* use petroleum jelly (Vaseline), as it holds in the heat.
- Topical anesthetics, such as Benzocaine, don't provide relief because they don't get absorbed into the skin.
- Be sure your child drinks lots of fluids.

What You Should Do to Reduce Your Child's Chance of Getting Skin Cancer:

Limit time outside between 10 a.m. & 3 p.m.

When outdoors:

- ✓ Cover up your child with a hat, a long-sleeved shirt, and long pants made of light-weight fabric.
- ✓ Keep your child in the shade.
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In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, your child has a **tendency to develop moles**.

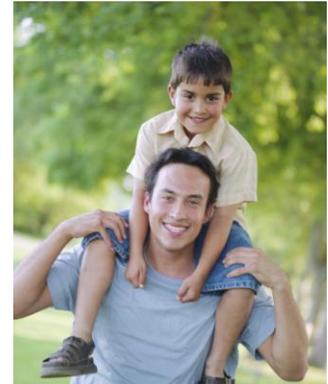
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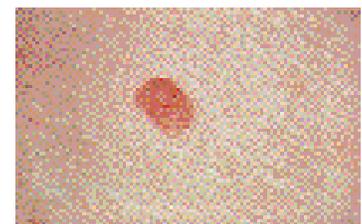


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Who gets moles?



- Only about 1 in 100 children is born with a mole. Children start getting other moles when they are about 6-12 months old.
- People get most of their moles in early childhood and at puberty, and then the number of moles stays about the same. Moles start to disappear in old age.
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- Melanoma occurs when melanocyte cells grow abnormally and become cancer.
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- The strongest risk factor for melanoma is the number of moles a person has. A person with a high number of moles has a **6 times higher lifetime risk** of getting melanoma compared to a person with a lower number of moles.
- Melanoma almost never develops before the teen years. Children who have lots of moles should begin having their moles checked by a doctor when they are teenagers.



The importance of moles in children

- Because most moles appear during childhood and because the number of moles that an adult has is strongly related to his chances of getting melanoma, **doctors believe that children who have a high number of moles are at much higher risk of getting melanoma when they are adults.**
- In the Colorado Kids Sun Care Program, we have been studying the number of moles on children age 3-6 years old. At age 6, the average number of moles on the children in the Colorado Kids Sun Care Program was 22 moles. Although not much is known about how the number of moles in childhood is related to getting melanoma as an adult, children who have *many* more than 22 moles are at increased risk of getting melanoma as adults. **Your child seems to be in this group of children with a high number of moles.** Be sure to read the next two newsletters to learn more about what you can do to lower your child's risk of getting melanoma and other types of skin cancer.

Coming up in the next newsletter....

How to lower your child's risk of skin cancer by limiting time in the sun



What You Should Do to Reduce Your Child's Chance of Getting Skin Cancer:

Limit time outside between 10 a.m. & 3 p.m.

When outdoors:

- ✓ Cover up your child with a hat, a long-sleeved shirt, and long pants made of light-weight fabric.
- ✓ Keep your child in the shade.
- ✓ Thickly apply sunscreen with SPF 15 or higher to all exposed skin.
- ✓ Have your child wear sunglasses that have 100% UV protection.



What are your child's chances of getting skin cancer as an adult?

Chances of getting skin cancer

are determined mostly by two things: **genetics and sun exposure**. **Genetics** are the biological characteristics that parents pass down to their children. Genetics determine:

- Skin color
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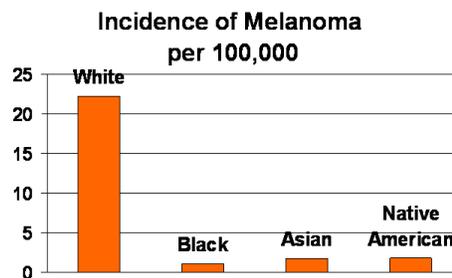
Together with a child's genetic background, **sun exposure** determines chances of getting skin cancer.

- Children who spend more time in the sun without protection are more likely to get skin cancer as an adult.

In this newsletter, we'll give you information about your child's most important risk factors. Based on the information that we have, these are: your child's **skin color, hair color, or eye color**, and your child has a **tendency to develop freckles**.

Light-skinned people have the highest rates of skin cancer in the world.

White people have the highest rates of skin cancer. Whites in the U.S. have an **18 times higher** lifetime chance of developing melanoma (the most deadly kind of skin cancer) than those with black skin. Non-melanoma skin cancers (basal and squamous cell cancers) are also much more likely in white-skinned people compared to other racial groups.



Blonde, red, or light brown hair increases the risk of skin cancer.

Compared to those with black hair, people with light brown hair have about **double the risk** of getting skin cancer, people with blonde hair have about **three times the risk**, and those with red hair have about **four times the risk** of developing skin cancer some day.



Children with blue or green eyes are more likely to get skin cancer

Children with blue eyes or green eyes are about **two times** more likely to get skin cancer compared to children with brown or black eyes.

Why are skin, hair and eye color related to skin cancer?

The color of skin is like a natural sunscreen. It absorbs harmful UV rays of light from the sun. **People with less color in their skin have less natural protection from the sun, and have higher chances of getting skin cancer.** Hair color and eye color often go along with skin color. Those with the lightest skin are more likely to have blonde, red or light brown hair, and more likely to have blue or green eyes. Light skinned people tend to get sunburns more easily, which damages their skin and can lead to skin cancer.

Myth or Fact?

"It's good if a child gets a tan because it protects them from sunburns and skin damage that could later lead to skin cancer."

This is a **MYTH**. Tanning is a sign of skin damage, just like a sunburn, and tanning increases the risk of skin cancer. A tan does provide a little protection against sunburn, but not nearly the amount of protection that sunscreen provides. **Some children, especially those with lighter skin, just don't tan, and they can get a lot of sunburns while trying to get a tan!** The best advice is to protect your child's skin from burning or tanning using the recommendations on the next page.

Kids who have freckles have a higher risk of skin cancer



- Children who get freckles are at higher risk for getting skin cancer some day. The more freckles a child has, the greater the risk. The risk could be as much as **3 times higher** for a child with lots of freckles compared to a child with no freckles.
- Freckles are caused by sun exposure, and they tend to come out in the summer and fade in the winter. When certain pigment cells in the skin are exposed to UV light from the sun, they make more pigment (color), which results in freckles.
- Freckles are most likely to appear on children with lighter skin who tend to burn easily in the sun. Freckles tend to run in families.
- Both freckles and skin cancer can be prevented by staying out of the sun, covering up, and wearing sunscreen.

Myth or Fact?

“I have freckles because my mom has freckles.”



Freckles are caused by two things: **genetics** and **sun exposure**. Children tend to have skin that is like their parents’ skin. So, if one of their parents has freckles, they may get freckles too. But, freckles will stay hidden in the skin unless they get sunlight. The sunlight stimulates the freckle cells to produce pigment (color). So, children have freckles both because one or both of their parents has freckles and because they spend time in the sun. If a child’s skin is protected from the sun using the tips in the green box, the freckles may stay hidden. If the freckles stay hidden, the child will be at lower risk for skin cancer.

Personal story

“I have fair skin with freckles, blue eyes and, as a youngster, I had red hair. I grew up in Florida and went to summer camp five or six times. I regularly became sunburned, once so badly that I literally spent a full week in bed in pain. I am paying the price now with wrinkled skin, pre-cancers and skin cancers.”

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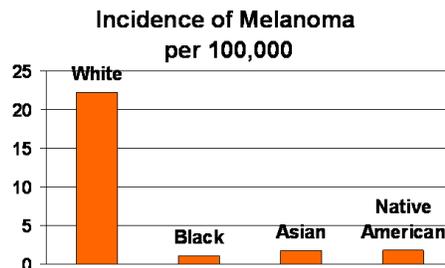
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Hair color and eye color often go along with skin color. Those with the lightest skin are more likely to have blonde, red or light brown hair, and more likely to have blue or green eyes. Light skinned people tend to get sunburns more easily, which damages their skin and can lead to skin cancer.



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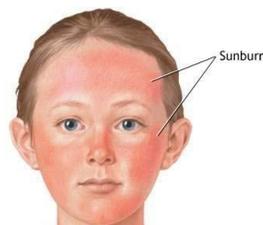
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Sunburns and tans

- How a person's skin reacts to being in the sun is determined by his or her genetics. A sunburn occurs when UV light causes the skin to become inflamed. A tan occurs when UV light causes the skin to produce melanin, the pigment that gives skin its color.
- Children who burn easily and tan poorly are **2 – 3 times** more likely to get skin cancer when they become adults, compared to children who tan more easily. Children who have fair skin and lighter colors of hair are more likely to burn easily.
- Studies have shown that having sunburns increases the risk for skin cancer. A severe sunburn is a sunburn that causes severe pain, blistering, or peeling of the skin. Having one or two severe sunburns may **double the risk** for skin cancer. People who have 3 or more severe sunburns may have **6 times the risk** of getting skin cancer.



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- It takes a few hours for a sunburn to appear, so your child may look fine when he or she is outside. Later, your child may show the redness, tenderness, and warmth of the skin that are signs of a sunburn.
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- Once you see the sunburn, it's too late to stop the damage that may later cause skin cancer. But there are still ways that you can make your child feel better. Sunburns can be very painful.
- Over-the-counter pain medicines, such as ibuprofen (Advil or Motrin), can reduce the inflammation and the pain, but only if taken within 24 hours of the sun exposure that caused the burn.
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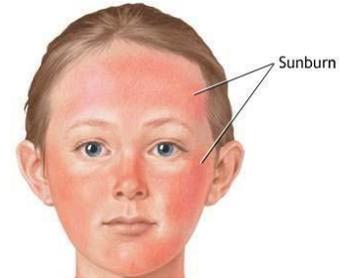
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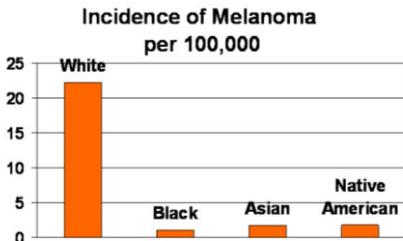
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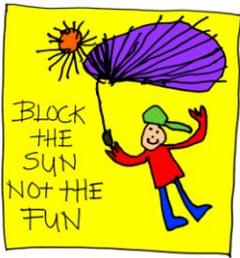
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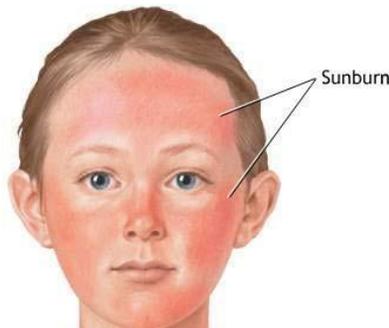
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Using the Sun Protection Toolbag



As a parent, you always want to protect your child as much as you can from illness and disease. To protect your child from over-exposure to the sun, and to lower your child's chances of getting skin cancer as an adult, you should use everything in the sun protection toolbag. In this and the next newsletter, we'll give you detailed information about **limiting time in the mid-day sun**, using sunscreen, and using clothing for sun protection. But don't forget to use everything in the toolbag!

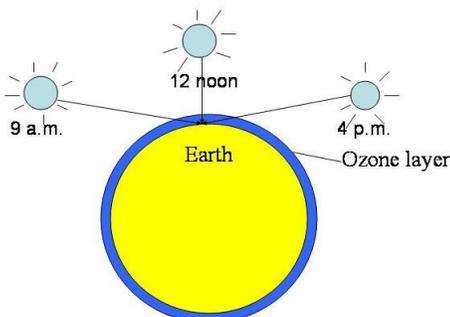
- **Limit time in the mid-day sun**
- Cover up with a hat, long sleeved shirt, and long pants
- Stay in the shade
- Thickly apply sunscreen with SPF 15 or higher to all unprotected skin
- Wear sunglasses with 100% UV protection

Helpful Hint!

Keep a "Sun Protection Bag" ready to go wherever you take your child! In it, always keep a hat, extra shirt, sunglasses, and sunscreen.

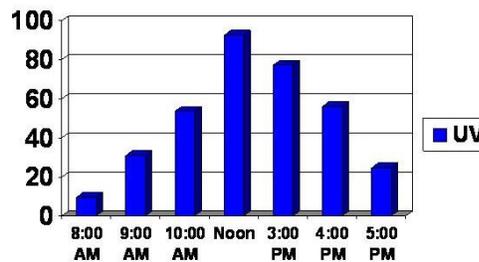
Limit time in the mid-day sun!

- Sunlight contains ultraviolet light (UV), which causes damage to the skin, and may eventually cause skin cancer.
- UV light is strongest in the middle of the day, when the sun is highest in the sky.
- At 9 a.m. and at 4 p.m., sunlight travels through more ozone, which screens out many of the harmful rays. At noon, when the sun is high overhead, it takes its shortest path through the ozone layer.



- The graph below shows the amount of UV light measured at different times of day during a sunny, July day in Colorado.

UV Light on a Sunny Day in July



- The amount of UV light increases sharply between 9 and 10 a.m. and drops sharply between 3 and 4 p.m.
- In Colorado, even on a rainy summer day, a lot of UV light comes through as the clouds pass by.
- Many people are surprised to learn that on a typical summer day in Colorado, the temperature reaches its highest point around 5:00 p.m., after the UV light has dropped sharply.

Altitude and the sun

- Have you noticed that it's easier to get sunburned at high altitudes?
- Most of Colorado is at least a mile above sea level, so there is less ozone to protect us from the UV rays of the sun.
- UV light increases about 5% for every 1000 feet in elevation. That means that in Denver we get about 25% more UV light than at sea level.
- In the mountains we may get as much as 40-70% more UV light as we would at sea level.



How can you protect your child? **Personal story**

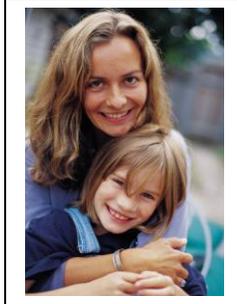
- Plan outdoor activities before 10 a.m. or after 3 p.m. whenever you can.
- Try to encourage those who plan group activities, such as soccer teams, to plan practices and games before 10 a.m. and after 3 p.m.
- People often plan trips to the pool or lake in the middle of the day, thinking that's the hottest part of the day. On summer days in Colorado, the hottest part of the day is often around 5:00 p.m. A trip to the pool or lake may be better late in the afternoon during the truly hottest part of the day.
- When you are outside in the middle of the day, lunch time provides a good excuse to take a break and move into the shade or go inside for awhile.
- On long summer days, there is still plenty of safe time to be active outside later in the day when your child will be naturally protected from the UV light.

Myth or Fact?

“When I feel the warmth of the sun on my skin, that’s a good way to remember to get inside or cover up.”

While anything that reminds you to protect yourself and your child from the sun is good, the sun can do just as much damage on a cold or windy day as a hot day. Sunlight is made up of many different wavelengths of light. It is the *infrared* rays of the sun that cause you to feel warmth on your skin. But it is the UV rays that cause skin damage, and UV rays carry no warmth! Instead of using temperature or warmth to decide whether or not you need protection, use time of day and how high the sun is in the sky to decide whether or not you need protection.

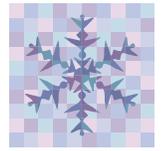
A mother from Aurora: *“I thought it would be impossible to avoid the mid-day sun. When the weather is nice, my 7-year-old Logan loves to play outside and I think the fresh air is good for her. But, I realized that if she comes inside for lunch and relaxes for awhile, and then we play a board game or do an art project, we can*



easily cut down on the amount of dangerous UV light that she gets. Some days, we go to the library or a museum in the middle of the day. Small changes, like half an hour here or there, can make a big difference. There’s still plenty of time for Logan to play outside later in the day!”

Fun activity for you and your child

- A good rule of thumb is that if your shadow is shorter than you are, that means that the sun is high in the sky and you need protection. If your shadow is longer than you are, the sun is lower in the sky and it is a good time to be outside.
- Find a place, like a concrete driveway or sidewalk, where you can use chalk to trace your child’s shadow.
- Have your child lie down and see if her shadow is shorter or longer than she is.
- Try this at different times on a sunny day, such as at 9 a.m., 11 a.m., 12 noon, 2 p.m., and 4 p.m.
- Talk with your child about how her shadow changes and how that can tell her whether it is a safe time to be in the sun.
- Talk about this with your child often when you are outside. For example you could say, “Oh look, your shadow is very short right now. What does that mean?”



Vacation tips for summer and winter

- Many people find vacations to be the hardest time to watch their sun exposure, especially if they are going to the beach or a pool.
- Try getting to the water early in the morning (maybe even for breakfast!).
- Take a long break for lunch, either indoors or in the shade. Go back to the beach or pool later in the afternoon. Since the temperature often reaches its peak around 5:00 p.m., you can enjoy the fun of cooling off in the water later in the day.
- Put on some extra clothes (such as a t-shirt) or use an umbrella. That way, your child can stay outside longer.
- The sun is also dangerous during vacations in the snow. UV light reflects off snow, and can make the sun as much as 80% more intense.
- Take indoor breaks from playing in the snow, and be sure to apply sunscreen thickly to any skin exposed to the sun.
- When you can’t avoid the sun in the middle of the day, be sure to use other sun protection strategies from the toolbag.

Next issue...Clothing that protects and the right way to use sunscreen



Using the Sun Protection Toolbag

As a parent, you realize that your child needs your help to be protected from the sun and to lower his or her chances of getting skin cancer as an adult. To do this, you should use everything in the sun protection toolbag. In this newsletter, we'll give you detailed information about using **clothing and sunscreen** for sun protection. But don't forget to use everything in the toolbag!

- Limit time in the mid-day sun
- **Cover up with a hat, long sleeved shirt, and long pants**
- **Thickly apply sunscreen with SPF of 15 or higher to all exposed skin**
- Stay in the shade
- Wear sunglasses with 100% UV protection

Helpful Hint!

Keep a "Sun Protection Bag" ready to go wherever you take your child! In it, always keep a hat, extra shirt, sunglasses, and sunscreen.

Pros and cons of sunscreen

If you are like many Colorado parents, you have mastered the habit of slapping sunscreen on your child on a warm sunny summer day. However, it's important that you know the pros and cons of sunscreen, and how to use it right. Sunscreen is an important part of sun protection, but it is *not* the whole story, *and* sunscreen needs to be used correctly.

PRO Unlike the suntan lotions that many of us used as kids, the sunscreens available today are very effective in preventing sunburns. This allows our children to stay outside much longer without getting sunburned.

CON Although sunscreen prevents sunburns, sunscreen *does not* absorb all of the UV light from the sun. Scientists have not been able to prove that sunscreen prevents *unseen damage that results in skin cancer.*

CON Since our children often stay outside longer with sunscreen because they don't get burned, they may be doing more damage to their skin, and they may be increasing their chances of skin cancer.

Use sunscreen the right way

- **Pick a sunscreen that has an SPF (sun protection factor) of 15 or higher.** Many doctors think that even higher SPF is better, such as SPF 30 or 45.
- **Apply sunscreen about 1 hour before going outside.** This gives the sunscreen time to react with the skin and give maximum protection.
- **Apply sunscreen in a thick coat on any exposed skin.** You should use about ¼ cup, or 2 ounces to cover a seven year old child.
- **Reapply sunscreen every 2 hours.** Reapply it more often when swimming or sweating.
- **Don't use sunscreen so that your child can stay outside longer.** Take regular breaks from the sun: go inside for lunch, move into the shade, or put on a shirt. Remember that your child's skin may still be getting damaged even though he isn't getting a sunburn.
- Whenever you can, use other things from the sun protection tool bag, things that are certain to protect your child from skin cancer, such as limiting time in the mid-day sun and covering up with clothing.

Clothing – an easier way to protect your child!

- Clothing is usually more effective than sunscreen because it *blocks* more of the sun than sunscreens can absorb.
- It's a lot easier to slip on a shirt than to slather up with sunscreen, and it saves money!
- **The best clothes for sun protection have a tight weave. Check clothing by holding it up to a window or lamp and seeing how much light gets through. The less light that gets through, the more protective it will be.**
- You can now get special sun protective clothing. Look for tags on clothing that say it is sun protective. Some department stores, including discount department stores, now carry this. Call your local store and ask if they have sun protective clothing. But, regular clothing with a tight weave works too.
- Sun protective clothing is also available on the internet. Try doing a Google search with the words "sun protective clothing."

What style of clothing?

More is always better when it comes to clothing. If you can't get your child to wear long pants and a long sleeved shirt, long shorts and a t-shirt are better than short shorts and a tank top. Think about where sunburns usually occur – the shoulders, back and face. A t-shirt and wide-brimmed hat can make a big difference in preventing sunburn.

Won't it be too hot?

We've been taught that when it's hot, you wear less clothing to keep cool.

But are we really cooler with less clothing? In many parts of the world much hotter than Colorado, such as



Children in Thailand

Thailand and the Middle East, people cover themselves from chin to toe. Loose fitting clothes shade the skin from the sun, and will actually feel cooler than less clothing. Try it!

Swimming

What would summer be without lots of trips to the pool? You can avoid the



problem of keeping sunscreen on a wet and active child by dressing your child in a swim "shirt" and "shorts" rather than a swim

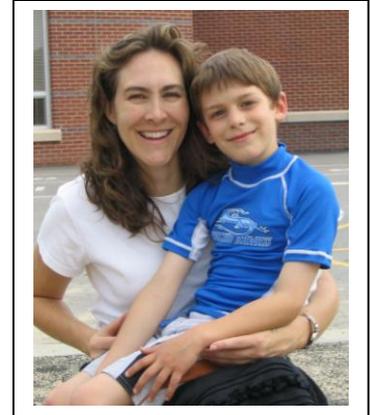
suit. "Surfer shirts," which are made of tight fitting stretch material and cover part of the arms, are available in some discount department stores. They are often called "rash guards" because they protect surfers from getting a rash from their surfboards. Children love the bright fabrics and patterns on these shirts! A single surfer shirt may cost about the same as 2-3 bottles of sunscreen, will last a whole summer, and will provide more complete protection than sunscreen.

Sunglasses

Over many years, UV light can damage the eyes and cause eye disease. Wearing sunglasses protects the eyes, as well as the skin right around the eyes. Choose sunglasses for your child that fit tightly and are labeled "100% UV protection." Many inexpensive sunglasses provide just as much protection as more expensive ones. Glasses that wrap around the side of the face are best. Your child should wear sunglasses between 10 a.m. and 3 p.m. when the UV light is the strongest. Be sure your child wears sunglasses in the snow! Sunlight reflects off snow, and can sunburn the eyes!



Personal story



A mother from Westminster: "At first, the thought of getting my son to wear clothes instead of sunscreen seemed impossible. But once I convinced my son Jamie to try wearing a surfer shirt to the pool, he never wanted to go back to spending so much time putting on sunscreen. I worry less about him getting burned because I know the shirt blocks out all the sun and won't wear off like sunscreen. His friends have started asking their parents for surfer shirts too! I've got peace of mind, he's got a shirt he loves, and I'm saving money not buying so much sunscreen."

What kind of clothing is

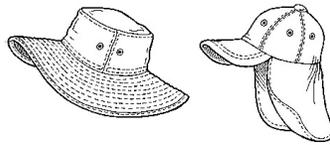


Not so good



Better

Best Hats



Best!!!

Hats

Choose a hat for your child that shades the face, back of the neck, and ears.

The best hats have brims 2-3 inches wide or are legionnaire style, and made of tightly woven material.