



Skin Cancer Facts

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GENERAL

- Each year in the US, nearly 5 million people are treated for skin cancer.⁶¹ In 2006, in the most recent study available, 3.5 million cases were diagnosed in 2.2 million people.²
- Each year there are more new cases of skin cancer than the combined incidence of cancers of the breast, prostate, lung and colon.²

- Treatment of nonmelanoma skin cancers increased by nearly 77 percent between 1992 and 2006.¹
- Over the past three decades, more people have had skin cancer than all other cancers combined.³
- One in five Americans will develop skin cancer in the course of a lifetime.⁵
- 13 million white non-Hispanics living in the US at the beginning of 2007 had at least one nonmelanoma skin cancer, typically diagnosed as basal cell carcinoma (BCC) or squamous cell carcinoma (SCC).³
- Between 40 and 50 percent of Americans who live to age 65 will have either BCC or SCC at least once.⁴
- Basal cell carcinoma is the most common form of skin cancer; an estimated 2.8 million are diagnosed annually in the US. BCCs are rarely fatal, but can be highly disfiguring if allowed to grow.⁶
- Squamous cell carcinoma is the second most common form of skin cancer. An estimated 700,000 cases of SCC are diagnosed each year in the US.^{6,7, 54}
- The incidence of squamous cell carcinoma has been rising, with increases up to 200 percent over the past three decades in the US.⁵⁴
- Organ transplant patients are up to 250 times more likely than the general public to develop squamous cell carcinoma (SCC).^{58, 59}
- About two percent of squamous cell carcinoma patients – between 3,900 and 8,800 people – died from the disease in the US in 2012.⁵⁴
- As many as three thousand deaths from advanced basal cell carcinoma occur annually in the US.⁶⁵
- Actinic keratosis is the most common precancer; it affects more than 58 million Americans.⁸

- Approximately 65 percent of all squamous cell carcinomas and 36 percent of all basal cell carcinomas arise in lesions that previously were diagnosed as actinic keratoses.⁹
 - About 90 percent of nonmelanoma skin cancers are associated with exposure to ultraviolet (UV) radiation from the sun.¹⁰
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MELANOMA

- One person dies of melanoma every hour (every 57 minutes).²
- An estimated 73,870 new cases of invasive melanoma will be diagnosed in the US in 2015.²
- An estimated 9,940 people will die of melanoma in 2015.²
- Melanoma accounts for less than two percent of skin cancer cases, but the vast majority of skin cancer deaths.²
- Of the seven most common cancers in the US, melanoma is the only one whose incidence is increasing. Between 2000 and 2009, incidence climbed 1.9 percent annually.¹¹
- 1 in 50 men and women will be diagnosed with melanoma of the skin during their lifetime.¹¹
- In 2009, there were approximately 876,344 men and women alive in the U.S. with a history of melanoma.¹¹
- Average survival with melanoma increased from 49 percent (1950 – 1954)¹² to 91 percent today.²
- About 86 percent of melanomas can be attributed to exposure to ultraviolet (UV) radiation from the sun.¹³

- Melanoma is one of only three cancers with an increasing mortality rate for men, along with liver cancer and esophageal cancer.¹⁴
- Survivors of melanoma are about nine times as likely as the general population to develop a new melanoma.¹⁵
- The vast majority of mutations found in melanoma are caused by ultraviolet radiation.¹⁶
- Melanoma accounts for six percent of cancer cases in teens 15-19 years old.²
- Melanoma is the most common form of cancer for young adults 25-29 years old and the second most common form of cancer for young people 15-29 years old.¹⁷
- The overall 5-year survival rate for patients whose melanoma is detected early, before the tumor has spread to regional lymph nodes or other organs, is about 98 percent in the US. The survival rate falls to 63 percent when the disease reaches the lymph nodes, and 16 percent when the disease metastasizes to distant organs.²
- On average, a person's risk for melanoma doubles if he or she has had more than five sunburns.¹⁹
- Half of all adults aged 18-29 report at least one sunburn in the past 12 months.⁴⁷
- Sustaining 5 or more sunburns in youth increases lifetime melanoma risk by 80 percent.²⁰
- Regular daily use of an SPF 15 or higher sunscreen reduces the risk of developing squamous cell carcinoma by 40 percent and the risk of developing melanoma by 50 percent.^{56, 57}

- Young men account for 40 percent of melanoma cases, but more than 60 percent of melanoma deaths.⁵³
- From ages 15-39, men are 55 percent more likely to die of melanoma than women in the same age group.⁵³
- An estimated 42,670 new cases of invasive melanoma in men and 31,200 in women will be diagnosed in the US in 2015.²
- An estimated 6,640 men and 3,300 women in the US will die from melanoma in 2015.²
- Melanoma is the fifth most common cancer for males and seventh most common for females.²
- Five percent of all cancers in men are melanomas; four percent of all cancers in women are melanomas.²
- From 1973 to 2004 in young people age 15 to 39, melanoma incidence among males increased by 61 percent and incidence among females more than doubled.⁶⁰
- Women aged 39 and under have a higher probability of developing melanoma than any other cancer except breast cancer.²
- Up until age 49, significantly more women develop melanoma than men (1 in 207 women vs. 1 in 294 men). From age 50 on, significantly more men develop melanoma than women. Overall, one in 34 men and one in 53 women will develop melanoma in their lifetimes.²
- The majority of people diagnosed with melanoma are white men over age 50.¹¹
- Caucasian men over age 65 have had an 5.1 percent annual increase in melanoma incidence since 1975, the highest annual increase of any gender or age group.²¹
- Adults over age 40, especially men, have the highest annual exposure to UV.²³

TANNING

- Ultraviolet radiation (UVR) is a proven human carcinogen.²⁴
- The International Agency for Research on Cancer, an affiliate of the World Health Organization, includes ultraviolet (UV) tanning devices in its Group 1, a list of the most dangerous cancer-causing substances. Group 1 also includes agents such as plutonium, cigarettes, and solar UV radiation.²⁵
- As of September 2, 2014, ultraviolet (UV) tanning devices were reclassified by the FDA from class I (low to moderate risk) to class II (moderate to high risk) devices.²⁶
- An estimated 1,957 indoor tanners landed in US emergency rooms in 2012 after burning their skin or eyes, fainting or suffering other injuries.⁶⁸
- Eleven states now prohibit indoor tanning for minors younger than age 18: California, Vermont, Nevada, Oregon, Texas, Illinois, Washington, Minnesota, Louisiana, Hawaii, and Delaware.⁶²
- Brazil and New South Wales, Australia, have passed complete bans on indoor tanning. As of January 2014, France, Spain, Portugal, Germany, Austria, Belgium, the UK, Iceland, Italy, Finland and Norway prohibit indoor tanning for youths under age 18.⁶³
- More than 419,000 cases of skin cancer in the US each year are linked to indoor tanning, including about 245,000 basal cell carcinomas, 168,000 squamous cell carcinomas, and 6,200 melanomas.⁵⁵
- More people develop skin cancer because of tanning than develop lung cancer because of smoking.⁵⁵
- One indoor UV tanning session increases users' risk of developing squamous cell carcinoma by 67 percent and basal cell carcinoma by 29 percent.⁵⁵

- The risk of basal cell carcinoma is increased by 73 percent if one tans six times per year in high school or college.²⁷
- Indoor tanners have a 69 percent increased risk of early-onset basal cell carcinoma.²⁸
- Approximately 25 percent of early-onset basal cell carcinomas could be avoided if individuals have never tanned indoors.²⁸
- Frequent tanners using new high-pressure sunlamps may receive as much as 12 times the annual UVA dose compared to the dose they receive from sun exposure.²⁴
- One minute in the average indoor tanning machine in England is twice as cancer-causing (carcinogenic) as one minute in the midday Mediterranean sun.⁵⁰
- Just one indoor tanning session increases users' chances of developing melanoma by 20 percent, and each additional session during the same year boosts the risk almost another two percent.⁴⁶
- Individuals who have used tanning beds 10 or more times in their lives have a 34 percent increased risk of developing melanoma compared to those who have never used tanning beds.⁶⁶
- 13 percent of high school students have indoor-tanned in the past year, including over 27 percent of 12th grade females and almost 31 percent of non-Hispanic white females.⁶⁴
- Of melanoma cases among 18-to-29-year-olds who had tanned indoors, 76 percent were attributable to tanning bed use.⁴⁸
- People who first use a tanning bed before age 35 increase their risk for melanoma by 75 percent.²⁹
- Nearly 30 million people tan indoors in the U.S. every year.³¹ Two to three million of them are teens.³²

- The indoor tanning industry has annual estimated revenue of \$5 billion.³²
- People who use tanning beds are 2.5 times more likely to develop squamous cell carcinoma and 1.5 times more likely to develop basal cell carcinoma.³³
- Seventy-one percent of tanning salon patrons are females.³⁴
- On an average day, more than one million Americans use tanning salons.³⁵

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ETHNICITY

- The annual incidence rate of melanoma is 1 per 100,000 in blacks, 4 per 100,000 in Hispanics, and 25 per 100,000 in non-Hispanic whites.²
- The overall average 5-year melanoma survival rate for African Americans is only 75 percent, versus 93 percent for Caucasians.²
- Skin cancer represents approximately two to four percent of all cancers in Asians.³⁶
- Skin cancer comprises one to two percent of all cancers in African Americans and Asian Indians.³⁶
- Melanomas in African Americans, Asians, Filipinos, Indonesians, and native Hawaiians most often occur on non-exposed skin with less pigment, with up to 60-75 percent of tumors arising on the palms, soles, mucous membranes and nail regions.³⁶
- Basal cell carcinoma (BCC) is the most common cancer in Caucasians, Hispanics, Chinese Asians and the Japanese.³⁶
- Squamous cell carcinoma (SCC) is the most common skin cancer among African Americans and Asian

Indians.³⁶

- Squamous cell carcinomas in African Americans tend to be more aggressive and are associated with a 20-40 percent risk of metastasis (spreading).³⁶
- Late-stage melanoma diagnoses are more prevalent among minority patients than Caucasian patients; 52 percent of non-Hispanic black patients and 26 percent of Hispanic patients receive an initial diagnosis of advanced stage melanoma, versus 16 percent of non-Hispanic white patients.³⁷
- Asian American and African American melanoma patients have a greater tendency than Caucasians to present with advanced disease at time of diagnosis.³⁸
- While melanoma is uncommon in African Americans, Latinos, and Asians, it is frequently fatal for these populations.³⁸

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PEDIATRICS

- Pediatric melanoma increased by an average of two percent per year from 1973 to 2009.⁵¹
- Melanoma is nine times more common between the ages of 10 and 20 than it is between birth and 10 years.³⁹
- Ninety percent of pediatric melanoma cases occur in patients aged 10-19.³⁹
- 6.5 percent of pediatric melanomas occur in non-Caucasians, which is a higher percentage than that seen in adults.⁴⁴
- Melanoma accounts for up to three percent of all pediatric cancers², and 6 percent of cancer cases in teens 15-19 years old.⁴⁰

- Between 1973 and 2001, melanoma incidence in those under age 20 rose 2.9 percent.⁴¹
- Diagnosis and treatment is delayed in up to 40 percent of childhood melanoma cases.⁴⁰

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SKIN AGING

- More than 90 percent of the visible changes commonly attributed to skin aging are caused by the sun.⁴²
- Daily sunscreen use by adults under age 55 can reduce skin aging.⁵²
- People who use sunscreen daily show 24 percent less skin aging than those who do not use sunscreen daily.⁵²
- Contrary to popular belief, 80 percent of a person’s lifetime sun exposure is not acquired before age 18; only about 23 percent of lifetime exposure occurs by age 18.²³

Lifetime UV Exposure in the United States

Ages	Average Accumulated Exposure*
1-18	22.73 percent
19-40	46.53 percent
41-59	73.7 percent
60-78	100 percent

*Based on a 78 year lifespan

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TREATMENT

- The annual cost of treating skin cancers in the US is estimated at \$8.1 billion: about \$4.8 billion for nonmelanoma skin cancers and \$3.3 billion for melanoma.⁶¹
- Between the period 2002-2006 and the period 2007-2011, the average annual cost for skin cancer treatment increased by more than 126 percent, compared to 25.1 percent for all other cancers.⁶¹
- In adults 65 or older, melanoma treatment costs total about \$249 million annually. About 40 percent of the annual cost for melanoma goes to treating stage IV (advanced) cancers, though they account for only three percent of melanomas.⁴³
- Estimated annual productivity losses attributable to melanoma total \$2.85 billion.⁶⁷
- The number of nonmelanoma skin cancers in the Medicare population went up an average of 4.2 percent every year between 1992 and 2006.¹

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