Office of Air and Radiation (6205J) EPA-430-F-13-028 November 2013

facts about: *Skin Cancer*

NORTH CAROLINA

survivor story: *Yvonne Short*

When I spotted a funny-looking mole on my leg, I saw a dermatologist right away. He took one look and said, "If that is not melanoma, I will be shocked." Sure enough, the biopsy came back positive, and I had the mole and surrounding tissue removed. Thankfully, the cancer had not spread—I am one lucky woman!

I grew up spending summers by the pool and on the beach. As a fair-skinned, blond child, I had to first burn and peel before I would start to tan. I seldom used sunscreen and at most, applied SPF 2 or 4. Every summer I wound up with a serious, blistering sunburn. As I got older, I started tanning—both outdoors and in tanning beds. I didn't realize the risk of skin cancer; I was only warned about getting wrinkles.

After my diagnosis, I still spend a lot of time outdoors—but I do it safely by wearing wide-brimmed hats, sun-protective clothing, and sunscreen. I especially enjoy sailing, walking my dogs, and gardening. No more tanning for me! Because of my newfound diligence, I will live to sail another race.

Yvonne Short enjoys sun-safe outdoor adventures in Cary, NC.

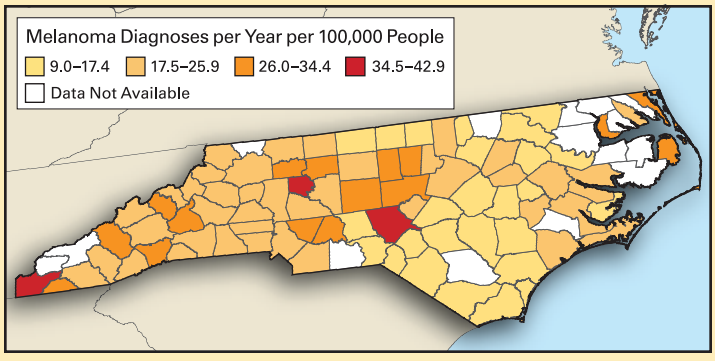
Skin cancer is the most common cancer diagnosed in the United States.[1-5] This fact sheet presents statistics about skin cancer for North Carolina and the United States.

just the facts: *Skin Cancer in North Carolina*

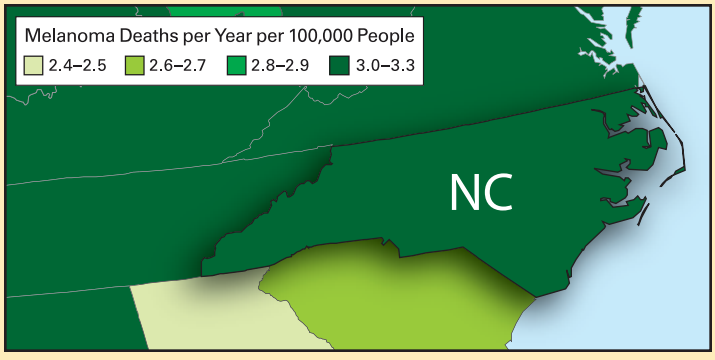
- **Sunburns**. A survey conducted in 2004 found that nearly 30% of White adults in North Carolina had experienced at least one sunburn in the past year.[6] Sunburns are a significant risk factor for the development of skin cancer.[4,7-9]
- **New Cases of Melanoma.** An estimated 2,620 residents of North Carolina will be diagnosed with melanoma in 2013.[3] Melanoma is responsible for about 75% of all deaths from skin cancer.[3,10]
  - The rate of new melanoma diagnoses in North Carolina is rising faster than that of all other types of cancer except thyroid—with an increase of more than 5% per year from 2005 to 2009.[11]
  - North Carolina has the fifth highest rate of new melanoma diagnoses nationwide among Whites, who are at the highest risk for melanoma.[11]
  - Davie County has the highest rate of new melanoma diagnoses in the state—123% above the national average.[11]
- **Deaths from Melanoma.** About 287 people in North Carolina die of melanoma every year.[12]
  - Among Whites, North Carolina has the third highest death rate from melanoma nationwide.[12,13]
  - The death rate from melanoma among residents of North Carolina aged 50 and older is rising faster than that of any other cancer except liver and bile duct cancer.[12]

[1–41] All references can be found on the SunWise Web site at: www.epa.gov/sunwise/statefacts.html

Annual Rate of New Melanoma Diagnoses, 2005–2009[11]
All Races, Both Sexes, All Ages



Melanoma Death Rates, 2005–2009[12]
All Races, Both Sexes, All Ages



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facts about: *Skin Cancer*

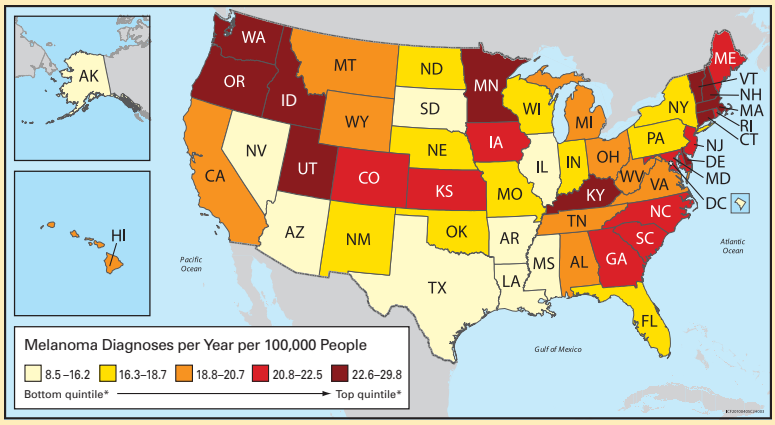
The Cost of Skin Cancer

In the United States, medical costs to treat melanoma skin cancer in 2010 were estimated at almost $2.4 billion. These costs are projected to reach at least $3.2 billion by 2020.[14]

statistics: *Cause for Concern*

- **More than 3.5 million cases of skin cancer are diagnosed each year,**[2] **making it the most common of all cancers in the United States.**[1,3-5] More people will be diagnosed with skin cancer in 2013 than the number diagnosed with breast, prostate, lung, and colon cancers combined.[3] **More than 1 in 5 Americans will develop skin cancer during their lifetime.**[15]
- **One American dies of melanoma every hour.**[3]
- **Melanoma is the most commonly diagnosed cancer and the second leading cause of cancer death for young adults 25–29 years old.**[16]
- **For people born in 2009, 1 in 50 will be diagnosed with melanoma**[16]**—nearly 30 times the rate for people born in the 1930s.**[17]

National Annual Rate of New Melanoma Diagnoses, 2005–2009[11]
All Races, Both Sexes, All Ages, Age-adjusted Rates



* Please note that delays in reporting melanoma cases to cancer registries are more common since they are usually diagnosed and treated in non-hospital settings such as physician offices. States are grouped into quintiles based on rates of melanoma diagnoses. A quintile is a statistical "block" representing 20% of a total. Because data are available for 50 states and D.C., four quintiles include ten states, and one quintile includes eleven. For example, the eleven states with the highest melanoma rates—22.6 to 29.8 diagnoses per 100,000 residents every year—are in the top quintile.

what works: *An Ounce of Prevention*

- **Unprotected exposure to ultraviolet light—a known human carcinogen—is the most preventable risk factor for skin cancer.**[7,18-23] Taking simple steps as early in life as possible can reduce one's risk.[3-5,24,25]
- **Early detection of melanoma can save one's life.**[26-32] Skin examinations may be the best way to detect skin cancer early.[3,33-37]
- The CDC found evidence that **education and policy approaches in primary schools (for children) and in recreational or tourism settings (for adults) can improve sun safety behaviors.**[38,39]
- Student self-reported data[40]—collected as part of the U.S. EPA's SunWise Program—showed that **teachers using the SunWise Tool Kit for 1-2 hours yearly can spur increases in students' sun safety knowledge and attitudes and small to modest improvements in short-term sun safety behaviors.**[41]
  - Using the data mentioned above, published modeling results show SunWise teaching between 1999 and 2015 could prevent more than 50 premature deaths and 11,000 future cases of skin cancer, saving the country more than $30 million in medical costs and productivity losses.[41]

[1–41] All references can be found on the SunWise Web site at: www.epa.gov/sunwise/statefacts.html

skin cancer prevention: *Action Steps*

- **Do Not Burn.** Overexposure to the sun is the most preventable risk factor for skin cancer.
- **Avoid Sun Tanning and Tanning Beds.** UV light from tanning beds and the sun causes skin cancer and wrinkling.
- **Use Sunscreen.** Generously apply a broad spectrum sunscreen with an SPF of 30 or higher. Reapply at least every two hours, and after swimming or sweating.
- **Cover Up.** Wear protective clothing, such as a long-sleeved shirt, pants, a wide-brimmed hat, and sunglasses with 99-100% UVA/UVB protection, when possible.
- **Seek Shade.** Seek shade when the sun's UV rays are most intense between 10 a.m. and 4 p.m.
- **Watch for the UV Index.** Pay attention to the UV Index when planning outdoor activities to prevent overexposure to the sun.